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PART II

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

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PART 135 REGULATORY REVIEW PROGRAM

Air Taxi Operators and Commercial Operators

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

[14 CFR Parts 121 and 135]

[Docket No. 16097; Notice No. 77-17]

PART 135 REGULATORY REVIEW PROGRAM

Air Taxi Operators and Commercial Operators

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking.

SUMMARY: This notice proposes substantially revised requirements for operations by persons holding air taxi/commercial operator certificates issued by the FAA. The proposals would provide greater operational flexibility for the air taxi/commercial operator and a higher level of safety. The air taxi/commercial operator industry has grown substantially in recent years and this growth has been accompanied by use of larger and more complex aircraft. In addition, segments of that industry have advocated that they be permitted to operate larger aircraft under regulations developed to apply to those operations.

DATE: Comments must be received on or before November 28, 1977.

ADDRESS: Send written comments on the proposals in duplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attn: Rules Docket (AGC-24), Docket No. 16097, 800 Independence Avenue, SW., Washington, D.C. 20591.

FOR FURTHER INFORMATION CONTACT:

Donald A. Schroeder, Safety Regulations Division, Flight Standards Service, Federal Aviation Administration, 800 Independence Avenue SW., Washington, D.C. 20591. Telephone 202-755-8715.

SUPPLEMENTARY INFORMATION:

Comments Invited

All interested persons are invited to participate in this proposed rulemaking by submitting such written data, views, or arguments as they may desire. Comments relating to the environmental, energy, or economic impact that might result from adoption of the proposals contained herein are invited and, to the fullest extent possible, should be supported by specific data. Communications should identify this regulatory docket and notice number (Docket No. 16097; Notice No. 77-17) and be submitted in duplicate to: Federal Aviation Administration, Office of the Chief Counsel Attention: Rules Docket, AGC-24, 800 Independence Avenue, SW., Washington, D.C. 20591. All communications received on or before November 28, 1977, will be considered by the Administrator before taking action on the proposed rules. The proposals contained in this notice may be changed in the light of the comments received. All comments received will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each substantive public contact with FAA personnel concerned with this rulemaking will be filed in the public docket.

Availability of NPRMs

Any person may obtain a copy of this notice of proposed rulemaking (NPRM) by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Attention: Public Information Center, APA-430, 800 Independence Avenue SW., Washington, D.C. 20591, or by calling 202-426-8058. Communications must identify the notice number of this NPRM. Persons interested in being placed on a mailing list for future NPRMs should also request a copy of Advisory Circular No. 11-2 which describes the application procedure.

Background

On September 13, 1976, the FAA issued Notice No. 76-18 (41 FR 38778) announcing the Part 135 Regulatory Review Program. The FAA and industry had, for several years, recognized the need to upgrade Part 135 because of the increasing volume and complexity of air taxi operations. The Regulatory Review Program to revise Part 135 involved the development and compilation of proposals and the holding of a Regulatory Review Conference, to be followed by issuance of an NPRM, analysis of comments received, and adoption of appropriate amendments.

This program followed an Operations Review Program initiated in 1975, which included a conference held in December 1975, to discuss proposals covering various regulations including Part 135. The Operations Review Conference produced a considerable number of proposals to amend air taxi rules, of which many were included in the compilation of proposals to be discussed at the Part 135 Regulatory Review Conference. In addition, in 1972 the National Transportation Safety Board conducted a study of the air taxi industry and, based on its findings, submitted a number of recommendations to FAA, many of which were included in the compilation of proposals.

The Part 135 Regulatory Review Conference held in Denver, Colo., was attended by more than 400 persons and 112 proposals were discussed. Following the conference, more than 100 written comments were received. In the compilation of proposals, there were 42 proposed amendments to present regulations and 70 proposed new rules. Following the Conference, the FAA determined that it was appropriate to revise the form of the present Part 135 regulation in order to present effectively a proposal consisting of numerous amendments and new rules.

Revision of Part 135

During the conference, certain industry commenters expresed concern about the application of the proposals that pertained to large aircraft, turbine-powered aircraft, and commuter air carrier operations. According to these commenters, separate rules for different kinds of operations and types of aircraft would present problems in applicability and in compliance, especially where a certificate holder conducts commuter air carrier and on-demand charter operations, and operates turbine and reciprocating engine powered aircraft.

The FAA concluded that regulatory distinctions based upon type of operation or type of powerplant were not necessary at this time; however, since the proposed rules cover a broad range of aircraft relative to passenger carrying capabilities, for certain proposals a distinction is established based on seating capacity rather than by aircraft type or maximum take off gross weight.

In revising Part 135 to incorporate the present rules, amendments, and new rules effectively, the number of subparts proposed is increased to eleven, one of which is reserved for possible future use. This better arranges the regulations into related functional areas, e.g., training, flight operations, maintenance, etc. For example, the substance of Subpart F, which was in the compilation of proposals discussed at the Part 135 Regulatory Review Conference, was included in other subparts of the proposed Part 135. Proposals in this subpart covered commuter operators, turbine powered aircraft, aircraft certificated to carry ten or more passengers and certain aircraft having a maximum certificated take off weight of more than 12,500 pounds.

Other proposals discussed at the Conference provided for various requirements which depended upon whether an aircraft was certificated to carry ten or more passengers, excluding crew. This concept of classification was retained in the proposed Part 135 for certain rules, i.e., Subpart C—Aircraft and Equipment and Subpart K—Maintenance, Preventive Maintenance, and Alterations.

Several proposals included in the Part 135 Review and in the Operations Review were withdrawn from consideration. They are listed in Appendix I and Appendix II following the proposed rule changes in the notice. Proposals removed from consideration during the Operations Review Program in 1975 that pertained to Part 135 rules are listed in Appendix III.

Proposals in Notice 76-28

Five proposed amendments to Part 135 that were developed as part of the Operations Review Program in 1975, were published in miscellaneous amendment Notice No. 76-28 in December 1976. This notice included proposed revisions to various regulations including those pertaining to Part 135. Following that publication date, it was decided to include in the revision to Part 135 all present rules and proposed changes to the part. Therefore, the five Part 135 proposals in Notice 76-28 will be included in this Part 135 notice. Comments on these sections are requested to supplement those already received. These proposals are identified as follows: (new section numbers) § 135.57, § 135.69, § 135.73(b) (h), § 135.127 and § 135.229(g).

EQUIPMENT REQUIREMENTS — TURBOJET POWERED AIRPLANES—10 OR MORE PASSENGERS

Included in this notice are proposals to require certain turbojet-powered airplanes to be equipped with Ground Proximity Warning Systems, (GPWS), Cockpit Voice Recorders (CVR), and Flight Recorders (FDR) for operations under Part 135.

The National Transportation Safety Board has recommended that all commercial passenger carrying aircraft have this equipment installed. The NTSB states that the GPWS would reduce approach and landing accidents and that use of the CVR and FDR during accident investigations would enhance safety.

In December 1976, the FAA issued two Special Federal Aviation Regulations (SFAR 30–1 and SFAR 33) authorizing airplanes having a maximum seating capacity of 30 seats or less, a maximum payload capacity of 7,500 pounds or less, and a maximum zero fuel weight of 35,000 pounds or less, to be operated until June 30, 1978, without this equipment. These SFARs were issued to provide additional time to determine whether or not new standards should be developed for operations conducted with those airplanes.

After further study, the FAA believes that consideration should be given to requiring the installation of this equipment in turbojet-powered airplanes, having 10 or more passenger seats, because of the complexity and high performance characteristics of those airplanes.

All interested persons are requested to provide comments concerning whether or not this equipment should be required in operations under Part 135. Comments should include information regarding installation and maintenance costs. This information will provide FAA additional data for use in reaching a decision concerning this equipment.

PETITION TO AMEND PART 135

Air Illinois, Inc., Golden West Airlines, Inc., and Swift Aire Lines, Inc., petitioned for rulemaking to amend Part 135 to permit operation of aircraft with a gross certificated take off weight in excess of 12,500 pounds if such aircraft have a seating capacity of 30 seats or less, and a maximum payload capacity of 7,500 pounds or less.

The proposed revisions of Part 135 would permit aircraft having a maximum passenger capacity of 30 seats or less and a maximum payload capacity of 7,500 pounds or less to be operated under the rules of Part 135, as it is proposed to be amended. If the proposals are adopted the FAA believes that the relief requested by the petitioners would be accomplished.

ECONOMIC IMPACT

The FAA has evaluated estimates of the economic impact which might result from the proposal and has compared the estimates with the anticipated safety benefits. Only four proposals involve major additional costs.

The first is that which would require airborne thunderstorm detection equipment for all multiengine aircraft certificated to carry ten passengers or more, exclusive of flight crew. The FAA estimates that this additional equipment would be required on 250 aircraft now in operation at a total cost of 3.5 million dollars. The FAA believes that the enhancement in safety which will result from use of this equipment justifies the additional cost.

The second proposal is that which would require use of a continuous maintenance program for all aircraft certificated to carry ten passengers or more, exclusive of flight crew. These aircraft are more complex than smaller capacity aircraft and a higher quality maintenance level should result from use of a properly managed continuous maintenance program. It is estimated that the additional cost will be 3.1 million dollars and it is the FAA's opinion that the increased level of safety which will result justifies the additional cost.

The third proposal would require all aircraft that carry ten or more passengers to be certified in the transport category by 1984. There will be an estimated 300 aircraft affected by this proposal. The FAA has taken into consideration that those aircraft will either have to be modified to meet transport category requirements or phased out of Part 135 operations. The FAA estimates that the cost to modify or replace existing aircraft would be 50 million dollars per year from the effective dates until June 30, 1984. This is a final step to upgrade the airworthiness standards of this type of aircraft used in air taxi operations. The FAA believes that the cost to upgrade airworthiness standards will increase the level of safety in air taxi operations and is justified and is in the public interest.

The fourth proposal would require all turbojet aircraft having a passenger carrying capicity, excluding any pilot seat, of 10 or more passengers, to have installed a cockpit voice recorder, a flight data recorder, and a ground proximity warning system. The FAA estimates that this additional equipment would be required on 65 aircraft that are now in operation with a total cost of 1.8 million dollars.

Evaluation of other proposed requirements, including crew training and testing, flight and duty time limitations, weather operation standards, management structure, aircraft equipment, and additional personnel, indicated that their cost impact would not be major.

REGULATORY EVALUATION

In developing this notice of proposed rulemaking the FAA gave careful consideration to all comments which resulted from the Part 135 Regulatory Review Conference. As might be expected, some proposals discussed at the conference received favorable comments and others drew unfavorable comments.

The proposals in this notice reflect the FAA's effort to be responsive to the needs of Part 135 certificate holders by developing regulations which recognize the dynamic growth of the industry and which provide additional flexibility to that industry. At the same time, the principal goal of the proposals is to provide an overall higher level of safety for Part 135 operations. As a consequence, it may be that, in some cases, the judgments made by the FAA in striking a balance between responsibilities to industry needs on the on hand, and the need for a higher level of safety on the other hand, will evoke controversy. Therefore, the FAA believes that the proposals should be considered potentially controversial.

REDESIGNATION OF PART 135 SECTIONS

In revising Part 135 to include proposed amendments to present rules and proposed new rules, it was necessary to redesignate the sections. For reference purposes, a table is included in this part of the preamble. It contains the new Part 135 section numbers, paragraphs within a section containing proposed amendments, the superseded section numbers and, in addition, proposal numbers used to develop the rule.

The proposal references show both Part 135 Regulatory Review and Operations Review proposal numbers. Proposal Numbers 1 through 110 indicate that the proposed revision came from the Part 135 Regulatory Review. Proposal numbers above 110 indicate that the proposed revision came from the Operations Review. It should be noted that some proposed rules list both Part 135 Regulatory Review and Operations Review proposal reference numbers. In these cases, informaton was extracted from both sources to develop the proposal. Several proposed changes do not have a proposal reference number. They were not developed in either the Part 135 Regulatory Review or Operations Review and were included because the FAA believes the proposed amendment is warranted. These are identified by the letters N/A (not applicable).

All Part 135 regulations as proposed to be redesignated are included in the rules portion of this notice. However, many are not amended except for a change in the section number designation. Since those are included in the notice to provide a complete rule for easy reference by persons reviewing the document, only comments on the new sections and the amended paragraphs of the present sections will be considered. In the reference table, only those paragraphs of present Part 135 section which contain proposed new or amended provisions are listed. For example, when all paragraphs in a section have been changed, the notation "all" will be shown in the column indicating all paragraphs are subject to comment, as would be the case if the proposed rule is new. The notation "none" in the amended section column notes that the rule was redesignated only and no amendment is proposed. Comments should not be submitted on the rules that have not been changed.

Also included in this notice is a proposed amendment to § 121.9. It is located at the front of the explanation and rules portions of the notice.

REFERENCE TABLE

New section No.	Amended portions of section	Old section No.	Proposal No.
	Subpart A.—General		
135.1	(135.1(a), (2), (3), (b)(2), (5), (6), (7))	135.1	1, 2 and 713.
135.2	(135.2(a), (b), (c), (d), (e))	135.2	3, 716 and 717.
135.3	(135.3(c))	135.3	N/A.
135.5	Deleted and Reserved	135.5	N/A.
135.7	(All)	135.9	5.
135.9	do	New	6.
135.11	do	135.11	7.
135.13	(135.13(b)(2))	135.13	8.
135.15	(All)	135.15	9.
135.17	None	135.17	N/A.
135.19	do	135.19	N/A.
135.21	(135.21(c))	135.7	718.
135.23	(135.23(a), (b)(1), (5), (6), (9 to 15), (18))	135.27	11, 381, 724, 721.
135.25	(135.25(a), (b))	135.31	12.
135.27	None	135.41	N/A.
135.29	do	135.47	N/A.
135.31	do	135.45	N/A.
135.33	do	135.69	N/A.
135.35	do	135.51	N/A.
135.37	(All)	New	44.
135.39	do	do	45.
135.41	do	do	46.
135.43	None	135.12	N/A.
135.45	(All)	New	N/A.
	Subpart B.—Flight Operations		
135.47	None	135.61	N/A.
135.49	(135.49(a), (4)(vii), (b), (c)(5), (6), (7), (8), (d)).	135.43	15, 735.
135.51	(All)	New	74.
135.53	do	135.119	32.
135.55	do	New	70.
135.57	do	do	69/751.
135.59	do	135.67	N/A.
135.61	None	135.49	N/A.
135.63	(All)	New	16.
135.65	do	do	4.
135.67	(135.67(a)(2))	135.29	N/A.
135.69	(All)	135.39	69/751.
135.71	None	135.71	N/A.
135.73	(135.73(b), (d), (h))	135.63	745, 746.
135.75	(135.75(a), (c)(2), (4), (5), (6), (7), (d), (e)).	135.117	31, 73, 783.
135.77	(All)	135.83	N/A.
135.79	do	135.114	30.
135.81	None	135.79	N/A.
135.83	(All)	135.33	13.
135.85	do	135.37	14.
135.87	None	135.52	N/A.
135.89	(All)	135.73	N/A.
135.91	(135.91(a))	135.75	21.
135.93	(135.93(a), (b), (c)(1))	135.77	22.
135.95	None	135.54	N/A.
135.97	do	135.35	N/A.
135.99	do	135.72	N/A.
135.101	do	135.53	N/A.
135.103	(All)	New	N/A.
135.105	do	135.81	68, 760.
135.107	None	135.64	N/A.
135.109	do	135.115	N/A.
135.111	do	135.89	N/A.
135.113	(All)	New	49.
	Subpart C.—Aircraft and Equipment		
135.115	None	135.141	N/A.
135.117	(135.117(c))	135.143	N/A.
135.119	None		
135.121	do	135.32	N/A.
135.123	do	135.149	N/A.
135.125	(135.125 (c), (d))	135.151	706.
135.127	(All)	135.161	815.
135.129	do	135.165	N/A.
135.131	do	135.153	N/A.
135.133	do	135.157	N/A.
135.135	(135.135 (f), (g), (h))	135.155	N/A.
135.137	None	135.159	N/A.
135.139	(135.139 (a)(14), (b))	135.163	N/A.
135.141	(All)	135.144	40A.
135.143	do	New	N/A.
135.145	do	do	75.
135.147	do	do	48A.
135.149	do	do	75A.
135.151	(135.151 (a) (1), (2), (b) (1), (2), (ii), (iii), (c)(1), (2)).	135.145	N/A.
135.153	None	135.147	N/A.
135.155	(All)	135.148	N/A.
135.157	(135.157(a))	135.167	41, 819.

New section No.	Amended portions of section	Old section No.	Proposal No.
Subpart D.—VFR/IFR Operating Limitations and Weather Requirements			
135.159	(All)	New	N/A.
135.161	None	135.91	N/A.
135.163	do	135.93	N/A.
135.165	(All)	135.95	N/A.
135.167	(135.167(a)(2))	135.97	769, 770.
135.169	(135.169(a))	135.99	N/A.
135.171	(All)	135.65	20, 750.
135.173	do	New	748.
135.175	(135.175(a), (c), (d))	135.101	25.
135.177	None	135.103	N/A.
135.179	(All)	135.105	27, 773.
135.181	do	135.109	28, 777.
135.183	do	135.107	609, 775.
135.185	do	135.111	29, 778, 779.
135.187	do	135.85	23, 762, 765.
135.189	do	135.87	47.
Subpart E.—Flight Crewmember Requirements			
135.191	do	New	NA.
135.193	do	135.121/123	785.
135.195	(Reserved)		
135.197	(All)	135.127	786.
135.199	do	New	707.
Subpart F.—Flight Crewmember Flight and Duty Time Limitations and Rest Requirements			
135.200–135.211	do	135.136	37, 76, 791, 793, 799.
Subpart G.—Crewmember Testing Requirements			
135.223	(All)	New	N/A.
135.225	(135.225(b)(c)(f))	135.138	39.
135.227	(135.227(c)(i))	135.139	N/A.
135.229	(135.229(c)(f)(g)(3))	135.131	789.
135.231	(All)	135.122	N/A.
135.233	do	135.133	N/A.
135.235	do	135.135	56.
Subpart H.—Training			
135.247	(All)	New	50.
135.239	do	do	51.
135.241	do	do	53.
135.243	do	do	52.
135.245	do	do	58.
135.247	do	do	59.
135.249	do	135.140	40, 804.
135.251	do	New	54.
135.253	do	do	56.
135.255	do	do	57.
135.257	(135.257(a), (b))	135.55	17, 738, 739.
135.259	(All)	135.137	38.
135.261	do	New	60.
135.263	do	do	62.
135.265	do	do	61.
135.267	do	do	63.
135.269	do	do	N/A.
Subpart I.—Airplane Performance			
135.271	(All)	New	79.
135.273	do	do	80.
135.275	do	do	81.
135.277	do	do	82.
135.279	do	do	83.
135.281	do	do	84.
135.283	do	do	85.
135.285	do	do	86.
135.287	do	do	87.
135.289	do	do	88.
135.291	do	do	89.
135.293	do	do	90.
135.295	do	do	91.
135.297	do	do	92.
135.299	do	do	93.
135.301	do	do	94.
135.303	do	do	95.
135.305	do	do	96.
Subpart J.—[Reserved]			

New section No.	Amended portions of section	Old section No.	Proposal No.
	Subpart K.—Maintenance, Preventive Maintenance and Alterations		
135.333	(All)	New	97.
135.335	do	do	98, 805.
135.337	(135.337(a)(16), (c), (e), (f))	135.57	18, 741.
135.339	(135.339)(a))	135.59	19.
135.341	(135.341(a), (d)(3), (f))	135.60	97, 744.
135.343	(All)	New section	N/A.
135.345	do	do	99.
135.347	do	do	100.
135.349	do	do	101.
135.351	do	do	102.
135.353	do	do	103.
135.355	do	do	104.
135.357	do	do	106.
135.359	do	do	107.
135.361	do	do	108.
135.363	do	do	109.
135.365	do	do	110.

AMENDMENT EXPLANATIONS

Each proposed amendment has an explanation containing a justification or reason for the action taken. They are listed sequentially by title and regulation number. Each is followed by the pertinent proposal number(s) used in the amendment development. The following are the explanations for proposed amendments:

PART 121

§ 121.9 Operations of small aircraft and certain large aircraft

Section 121.9 governs the operation of small airplanes under Part 121. The title of § 121.9 is changed to refer to small aircraft and certain large aircraft and the first sentence of paragraph (a) would be revised to require aircraft having a maximum passenger capacity of 30 seats or less and a maximum payload capacity of 7,500 pounds or less to be operated under the rules of Part 135, excepting specified sections of Part 135. Those sections presently listed in § 121.9 would be changed, where necessary, to reflect the proposed redesignation of those sections in Part 135.

Ref. Proposal No. 42, Part 135 Review.

PART 135

SUBPART A—GENERAL

§ 135.1 Applicability

The current Part 135 applies to air taxi operators and commercial operators using small aircraft. The proposed changes to this part include a number of proposals relating to the operation of aircraft with a maximum passenger capacity of 30 seats or less and maximum payload capacity of 7,500 pounds or less.

For many years § 1.1 of the Federal Aviation Regulations has defined a large aircraft as one of more than 12,500 pounds maximum certificated takeoff weight and a small aircraft as one of 12,500 pounds or less maximum certificated takeoff weight. Among other things the distinction between large and small aircraft determines the operating rules which apply to the operation of a particular aircraft. For example, § 135.2 (a) requires air taxi operators to comply with the operations requirements of Part 121 applicable to supplemental air carriers for operations conducted with any aircraft having a maximum certificated takeoff weight of more than 12,500 pounds. Conversely, § 121.9 requires air carrier operations conducted in small airplanes to be conducted in accordance with the rules of Part 135 applicable to air taxi operations.

Effective September 17, 1972, the Civil Aeronautics Board amended Part 298 of the Board's economic regulations to provide that for the Board's economic regulation purposes, a large aircraft was defined, with certain exceptions, as having a maximum passenger capacity of more than 30 seats or a maximum payload capacity of more than 7,500 pounds. This served to focus attention on the distinction between large and small aircraft in § 1.1 of the Federal Aviation Regulations. Moreover, continuation of this distinction was questioned from time to time by various persons and groups. The FAA has intensively studied the distinction between large and small aircraft and has considered the views expressed in the Part 135 Regulatory Review.

The FAA now proposes to increase the Part 135 aircraft size limitations to aircraft which have a maximum passenger capacity of 30 seats or less and a maximum payload capacity of 7,500 pounds or less, and to require Part 121 and § 135.2 operators to operate such aircraft under the rules of Part 135, upgraded as explained below.

The FAA believes that the level of safety in Part 135 should be upgraded to accommodate the larger aircraft which are proposed for operation under the rules of Part 135. In recent years there has been a substantial change in the type of operations conducted by air taxi operators and commercial operators under Part 135. In addition to providing service to off-line points for the convenience of individual passengers or providing emergency air service, an increasing number of air taxi operators are conducting operations as "Commuter Air Carriers."[1] Moreover, there has been a substantial increase in the number of air taxi and commercial operators conducting operations in small airplanes certificated to carry 10 or more passengers and in small complex multiengine turbine powered airplanes. Thus, while some operations under Part 135 are still conducted on an occasional, nonscheduled basis with small, low density airplanes, other operations are conducted with such frequency and regularity or utilize airplanes of such capacity and complexity that increased surveillance and standardization are necessary to maintain the required level of safety. Accordingly, one of the major goals of these proposals is to upgrade the overall level of safety under Part 135.

The applicability provision in § 135.1 (a) (3) would be revised to make Part 135 applicable to operations conducted in aircraft having a maximum passenger capacity of 30 seats or less and a maximum payload capacity of 7,500 pounds or less.

After consideration of factors relating to the scope of rescue operations conducted under the list of excepted operations contained in § 135.1, the FAA has concluded that safety warrants the inclusion of such operations among those operations governed by the rules of Part 135. Accordingly, rescue operations as contained in paragraph (b) (4) (v) would be deleted and the sub-items of this paragraph renumbered as necessary.

In addition, the contents for former paragraphs (b) (5), (6), and (7) would be deleted because the provisions contained in these paragraphs are no longer needed. Pursuant to revised paragraph (b) (5), sightseeing flights conducted in hot air balloons would be expected from compliance with Part 135 since, in light of present technology, hot air balloon flight operators cannot meet the requirements of Part 135. Similar to the exclusion in § 135.1(b) for nonstop sightseeing flights, revised paragraph (b) (6) would provide that nonstop flights, within a 25 statute mile radius of the airport of takeoff, carry persons for parachute jumping would no longer be covered under Part 135. However, sightseeing flights in hot air balloons and the parachute jumping flights would remain subject to the rules of Part 91. Pursuant to revised paragraph (b) (7), infrequent helicopter airlift operations conducted within a 25 statute mile radius of the airport of takeoff would not be covered under Part 135, provided that the restrictions and procedures prescribed in paragraph (b) (7) are followed. In addition, such operations would be subject to the rules of Part 91.

Ref. Proposal Nos. 1 and 2, Part 135 Review; Proposal No. 713, Ops. Review.

§ 135.2 Air taxi operations with large aircraft

Paragraph (a) of the proposed rule would be amended to refer to a new subparagraph (d) which would be added to § 135.2 to require air taxi operations in aircraft having a maximum passenger capacity of 30 seats or less and a maximum payload capacity of 7,500 pounds

[1] As defined in Part 298 of CAB Regulations, a "Commuter air carrier" is an air taxi operator which: (1) Performs at least five round trips per week, between two or more points and publishes flight schedules which specify the times, days of the week, and places between which such flights are performed, or (2) transports mail by air pursuant to contract with the United States Postal Service.

or less to be conducted in accordance with the rules of Part 135. Paragraph (d) would also provide that an operator required to operate under paragraph (d) may operate or continue to operate under the provisions of § 135.2(a) (1) and (2) if he applies for and is issued operations specifications for such operations under § 135.19.

Similarly, paragraph (b) of § 135.2 would be changed to provide that an air taxi operator who is required to comply with Subpart L of Part 121 pursuant to paragraph (a) may perform and approve maintenance, preventive maintenance, and alterations on aircraft having a maximum passenger capacity of 30 seats or less and a maximum payload capacity of 7,500 pounds or less as provided in Subpart L.

Editorial changes to § 135.2(c) are proposed to reflect the provisions in the proposed revised Part 135 which are the counterparts of the provisions in paragraph (c). The requirements of current paragraph (e) for a lockable door in certain turbojet-powered airplanes would be deleted from this section and reinserted in § 135.125 to apply to turbojet-powered airplanes having a passenger seating capacity, excluding any pilot seat, of 10 seats or more, operating under the rules of Part 135. A forward observer's seat would be included among certain other related requirements of § 135.63 and either it or an approved forward passenger seat, for use by the Administrator while conducting enroute inspections, would be required on all aircraft.

Paragraph (e) of the proposed rule would define certain terms pertinent to the operation of "large" aircraft under Part 135.

Ref. Proposal No. 3, Part 135 Review. Proposal Nos. 716 and 717, Ops. Review.

§ 135.3 Rules applicable to operations subject to this part

This section is currently § 135.3, redesignation is not necessary in the revised Part 135.

Present paragraph (b), which requires operations conducted under Part 135 outside the United States to comply, among other things, with Annex 2, Rules of the Air, to the Convention on International Civil Aviation, would not be changed. A new paragraph (c) would be added to provide for incorporation by reference of Annex 2 to the Convention on International Civil Aviation, Sixth Edition—September 1970, with amendments through Amendment 20 effective August 1976.

§ 135.5 Gyroplane operations

It is proposed to delete this provision. The rule is not needed because there are currently no gyroplanes presently certificated which are believed to be capable of being used in operations under Part 135.

§ 135.7 Certification and operations specifications required

This section, curently § 135.9 has been redesignated as § 135.7 and contains proposed amendments which would prohibit operations in large aircraft having a maximum passenger capacity of more than 30 seats or a maximum payload capacity of more than 7,500 pounds, without, or in violation of, operations specifications issued under Part 121. This change is necessary in order to implement the concept which would require aircraft having a maximum passenger capacity of 30 seats or less and a maximum payload capacity of 7,500 pounds or less to be operated under the rules of Part 135.

Ref. Proposal No. 5, Part 135 Review.

§ 135.9 Applicability of rules to unauthorized operators

Part 135 currently applies only to persons holding ATCO certificates. This proposal would make it a violation of each operating rule of Part 135 to conduct operations requiring an ATCO certificate and operations specifications without holding that certificate and operations specifications.

Ref. Proposal No. 6, Part 135 Review.

§135.11 Duration of certificate

There is no time specified in the current rule in which to return a suspended or revoked certificate to the Administrator.

This proposal would require a suspended or revoked ATCO certificate to be returned to the Administrator within 10 days after receipt of notice of suspension or revocation.

Ref. Proposal No. 7, Part 135 Review.

§ 135.13 Application and issue of certificate and operations specifications

This proposal would amend paragraph (b) (2) to provide clarification concerning the scope of operations authorized including the type of aircraft authorized in addition to category and class. In addition, the registration numbers of aircraft subject to a continuous airworthiness maintenance program and certain other maintenance related information would be included. These factors are considered relevant by the FAA and are spelled out in sufficient detail to clearly define the scope of the certificate holder's authority.

Ref. Proposal No. 8, Part 135 Review.

§ 135.15 Eligibility for certificate and operation specifications

The flush paragraph in § 135.15(a) (3) would be amended to change the reference to "large aircraft" to "large aircraft having a maximum passenger capacity of more than 30 seats or a maximum payload capacity of more than 7,500 pounds." This change is consistent with the proposal to increase the size of aircraft to be operated under the rules of Part 135. In addition, a new paragraph (b) would be added specifying the basis upon which the FAA may deny an applicant an ATCO certificate.

Operating experience has shown that the compliance disposition of an operator and persons serving in key positions is a reliable indication of future performance.

Ref. Proposal No. 9, Part 135 Review.

§ 135.17 Amendment of certificate

This section is currently § 135.17; Redesignation is not necessary in the revised Part 135.

§ 135.19 Amendment of operations specifications

This section is currently § 135.19; Redesignation is not necessary in the revised Part 135.

§ 135.21 Emergency operations

This section, formerly § 135.7, would be redesignated as § 135.21. The word "inflight" has been deleted, thus expanding the application of this section to ground as well as air emergencies, as in the case of pilot incapacitation requiring the use of a person not qualified under Sections 135.33, 135.52, or 135.53 for assistance with flight crewmember duties. In addition, minor editorial changes would be made to make this section consistent with Section 91.3 of Part 91 of this chapter.

Ref. Proposal No. 718, OPS Review.

§ 135.23 Manual requirements

This section, currently § 135.27, would be redesignated as § 135.23. In addition, this section would be revised by amending paragraph (a) to require each certificate holder who is required to have a manual to prepare a manual acceptable to the Administrator. Further, each flight, ground, and maintenance employee of the certificate holder would be required to use the manual in the conduct of the certificate holder's flight operations.

Paragraph (b) would be amended to require that each manual must be kept in a form acceptable to the Administrator. Paragraph (b) (1) would provide that in addition to the identity of each person in a management capacity who is authorized to act for the certificate holder, that person's duties, responsibilities and authority must also be outlined. Paragraph (b) (2) would be amended by changing the word "airplanes" to read "aircraft."

Paragraph (b) (6) would be amended to require reporting and recording mechanical irregularities that come to the attention of the pilot in command before, during, and after completion of a flight.

Present paragraphs (b) (9) through (b) (15) would be renumbered as paragraphs (b) (10) through (b) (16) respectively to allow the insertion of a new paragraph (b) (9) referring to procedures in accordance with § 135.149 for the release for, or continuation of flight if any item of equipment amenable to placement on an approved minimum equipment list becomes inoperative or unserviceable en route. This change is made necessary by the incorporation of a new § 135.149 which would provide regulatory authority for the use of a Minimum Equipment List in operations under Part 135 in multiengine aircraft.

Renumbered subparagraph (b)(13) would be revised to require inclusion in the manual of a list of the functions assigned each category of required crewmembers in connection with emergency and emergency evacuation duties under § 135.113.

With respect to renumbered paragraph (b)(16), there have been instances in which ATCO certificate holders have inadvertantly accepted hazardous material on board an aircraft because the operator's employees did not recognize the material as hazardous. The amendment to this paragraph is, therefore, designed to ensure that ATCO certificate holders provide their employees sufficient guidance in the recognition and proper handling of hazardous material so that such materials can be selectively identified and accepted or refused for shipment without derogation of safety. In addition, an out-dated regulatory reference has been deleted and the current regulatory reference inserted in place thereof.

A new paragraph (c) would be added to provide that each certificate holder shall maintain at least one copy of its manual at its principal base of operations.

Ref. Proposal No. 11, Part 135 Review; Proposal Nos. 381, 721, and 724, OPS Review.

§ 135.25 Aircraft requirements

This section, currently § 135.31, would be revised and redesignated as § 135.25. In addition, present paragraphs (a) and (b) would be redesignated as paragraphs (b) and (c) respectively to permit the incorporation of a new paragraph (a) into this section to provide that an aircraft used in operations under this Part must be registered as a civil aircraft of the United States and carry an appropriate and current airworthiness certificate, and must be in an airworthy condition and meet the applicable airworthiness requirements, including those relating to identification and equipment. This provision is needed in Part 135 as questions have been raised concerning the use of foreign registered aircraft in operations under this Part. The final sentence of redesignated paragraph (b) would make it clear that a Part 135 certificate holder is not prohibited from using or authorizing the use of an aircraft for other than air taxi or commercial operations and is not required to have exclusive use of each aircraft that he uses.

Ref. Proposal No. 12, Part 135 Review.

§ 135.27—Business office and operations base

This section, currently § 135.41 would be redesignated as § 135.27 with no other changes.

§ 135.29 Use of business names

This section, currently § 135.47, would be redesignated § 135.29 with no other changes.

§ 135.31 Advertising

This section, currently § 135.45, would be redesignated § 135.31 with no other changes.

§ 135.33 Area limitations on operations

This section, currently § 135.69, would be redesignated § 135.33 with no other changes.

§ 135.35 Termination of operations

This section, currently § 135.51 would be redesignated § 135.33 with no other changes.

§ 135.37 Periodic financial status review

This proposal is a modified version of Proposal No. 44 which was presented in the Compilation of Proposals under the Part 135 Regulatory Review Conference held in Denver, Colo., November 8–11, 1976. While the original proposal would have required each certificate holder to submit certain financial data annually, this proposal would require each certificate holder to permit the Administrator to review its financial status annually. Data to be furnished by the certificate holder for review would include specified items needed to determine a company's financial condition and whether it has sufficient economic resources to support a safe operation. The information which must be furnished to the Administrator consists of the minimum financial data the FAA believes necessary to fulfill its safety responsibilities. It has long been the opinion of the FAA that financial capability is an essential ingredient of air safety. Operating experience has established the fact that the financial status of some ATCO certificate holders had a direct bearing on the willingness of those certificate holders to compromise safety in an effort to reduce operating costs. Such actions expose the public to needless safety hazards and not in the public interest. This factor has also been recognized by both the Civil Aeronautics Board and the National Transportation Safety Board. As a result, the FAA believes that the review of financial data of air taxi certificate holders is necessary to provide the FAA a more effective means of ensuring passenger safety in air taxi operations.

Ref. Proposal No. 44, Part 135 Review.

§ 135.39 Management personnel requirements.

This new proposal would require an ATCO certificate holder to have qualified management personnel in the positions of director of operations, chief pilot, and director of maintenance, and would provide for a modification of the above named positions if deemed appropriate by the Administrator. In addition, information concerning management personnel would be included in the certificate holder's manual. These changes are necessary to upgrade the level of safety in Part 135.

Ref. Proposal No. 45, Part 135 Review.

§ 135.41 Management personnel qualifications.

This proposal would prescribe certain qualifications which must be met before a person may serve as a director of operations, chief pilot, or director of maintenance for an ATCO certificate holder. The FAA wishes to ensure that persons selected to fill these positions have sufficient aeronautical and managerial experience to fulfill the purpose of the regulations. However, the Administrator may grant a deviation from the proposed requirements upon a finding that a person possesses aeronautical experience judged equivalent to the specified qualifications.

Ref. Proposal No. 46, Part 135 Review.

§ 135.43 Carriage of narcotic drugs, marihuana, and depressant or stimulant drugs or substances.

This section currently § 135.12, would be redesignated § 135.43 with no other changes.

§ 135.45 Crewmember certificate: international operations: application and issue

This proposal would provide for the application for, and issuance of, crewmember certificates to persons employed as flight crewmembers or crewmembers on U.S.-registered aircraft engaged in international air commerce to facilitate entry and clearance into ICAO contracting states. Upon termination of the assignment in international air commerce, the certificate would be surrendered to the nearest FAA District Office. There are currently no such provisions in Part 135.

§ 135.47 General

This section, formerly § 135.61, would be redesignated § 135.47 with no other changes.

SUBPART B

§ 135.49 Recordkeeping requirements

This section, currently § 135.43, would be redesignated as § 135.49. With the exception of the redesignation of this section, the proposed changes result from experience which has shown that the current recordkeeping requirements for ATCO certificate holders are no longer adequate and need broadening. The recordkeeping requirements of current § 135.43 are not of sufficient scope to permit ready ascertainment of compliance with provisions of this Part. Paragraph (a) would be changed to permit the certificate holder to maintain the records required by this section at other than his principal business office, if approved by the Administrator. In addition, paragraph (a)(4)(vii) would be changed to require both flight and duty time records in sufficient detail to determine compliance with the flight and duty time limtiations of this Part. Paragraph (b) would be changed to require the retention of records for 12 months instead of 6 months. Paragraph (c) would be changed to apply to all multiengine aircraft operations. Paragraph (c)(5) would provide relief from compilation of the actual center of gravity if the aircraft is loaded according to a loading schedule or other approved method that assures that the center of gravity of the loaded aircraft is within approved limits. Additionally, paragraph (c) would be changed to require that a load manifest

must be prepared for multiengine aircraft before each takeoff, and to incorporate the addition of proposed new subparagraphs (6), (7), and (8), to require a record of the registration or flight number of the aircraft used, the origin or destination, and the identification of crewmembers and their particular assignments.

Ref. Proposal No. 15, Part 135 Review; Proposal No. 735, Ops. Review.

§ 135.51 Flight in formation: facilities and services

This proposal would be designated as § 135.51. This proposed amendment would require each pilot in command to obtain specific kinds of information in preparation for a flight under this Part and to obtain during flight certain information that may be critical to the safety of that flight. This proposal embodies the FAA's view that all reasonable precautions must be taken to ensure the safety of flight. It is needed to emphasize the need for thorough preflight preparation and the inflight update of information essential to the safety of flight in operations under Part 135.

Ref. Proposal No. 74, Part 135 Review.

§ 135.53 Reporting of mechanical irregularities

This section, currently § 135.119, would be redesignated as § 135.53 and it would be amended to improve the maintenance records requirements. The necessity for improvement is based upon the FAA's review of procedures used by Part 135 certificate holders to determine airworthiness.

Each certificate holder would be required to provide an aircraft maintenance log for use of flight and maintenance personnel and each person taking action concerning a reported or observed failure or malfuction would be required to record that action in the aircraft maintenance log. The certificate holder would be required to establish and include in its manual a procedure for keeping adequate copies of the log in the aircraft. Before takeoff, the pilot in command would be required to ascertain the status of, and required corrective action concerning, each irregularity entered in the log at the end of the preceding landing. In addition, after each landing, the pilot in command would be required to enter in the log each defect or mechanical irregularity which came to his attention during the flight.

Ref. Proposal 32, Part 135 Review.

§ 135.55 Reporting potentially hazardous meteorological conditions and irregularities of communications or navigation facilities

There is currently no provision in Part 135 for the reporting by pilots of important safety information encountered during flight. This proposal would require the reporting to an appropriate ground radio station of information which may be critical to the safety of any other flight.

Ref. Proposal 70, Part 135 Review.

§ 135.57 Restriction or suspension of operations: continuation of flight in an emergency

As proposed, paragraph (a) would place the responsibility for restricting or suspending operations under conditions of known hazards on both the certificate holder and the pilot in command. Paragraph (d) is similar to § 121.551. Paragraph (b) would prohibit the pilot in command from continuing to an airport of intended landing under paragraph (a) unless in the opinion of the pilot in command there is no safer procedure available as an alternative to the continuation of flight in unsafe conditions.

Ref. Proposal No. 69, Part 135 Review; Proposal No. 751, OPS Review.

§ 135.59 Airworthiness check

This section, currently § 135.67, remains the same except for an editorial change of the reference "§ 135.60 to § 135.341."

§ 135.61 Inspections and tests

This section, currently § 135.49, would be redesignated § 135.61 with no other changes.

§ 135.63 Inspectors credentials: admission to pilot's compartment and forward observer's seat

This proposal would provide an inspector of the Federal Aviation Administration conducting an inspection with unrestricted access to the pilot compartment of an aircraft upon the presentation of an Aviation Safety Inspector credential, FAA Form 110A, to the pilot in command. Additionally, it would ensure that suitable seating arrangements are provided to permit the inspector to properly monitor the flight during an en route inspection.

Ref. Proposal No. 16, Part 135 Review.

§ 135.65 Responsibility for operational control

This proposal would place the responsibility for operational control (as defined in Part 1) on the certificate holder, and require the certificate holder to list in the required manual each person authorized to exercise operational control on its behalf.

Ref. Proposal No. 4, Part 135 Review.

§ 135.67 Flight locating requirements

This section, currently § 135.29 would be redesignated as § 135.69. The section is unchanged except for the deletion of the words "Establish a procedure" in paragraph (a)(2) and insertion of the word "Provide" in lieu thereof for clarification purposes.

§ 135.69 Informing personnel of operational information and appropriate changes

This section, currently § 135.39, would be redesignated as § 135.69. It would be amended by renumbering paragraphs (a), (b), (c) and (d) and amending renumbered paragraph (a)(4) to permit a Part 135 certificate holder conducting foreign operations to use a commercial publication containing the same information as to the International Flight Information Manual. A new paragraph (b) would be included to require each certificate holder to keep its operations personnel informed of changes associated with the use of navigation aids, air traffic control procedures and regulations, and other areas essential to the safety of flight operations.

Ref. Proposal No. 67, Part 135 Review; Proposal No. 731, Ops. Review.

§ 135.71 Operating information required

This section is currently § 135.71. Redesignation is not necessary. The section reference number in § 135.71(a)(5) was amended to § 135.151.

§ 135.73 Carriage of persons without compliance with the passenger-carrying provisions of this Part

This section, currently § 135.63, would be redesignated as § 135.73. In addition, it would be amended by revising paragraphs (b) and (d) and adding a new paragraph (h) to broaden the list of persons who may be carried without compliance with the passenger-carrying provisions of Part 135. Paragraph (d) also would be revised to include the current citation of the regulation where the definition of "hazardous materials" is found.

Ref. Proposal Nos. 745 and 746, OPS Review.

§ 135.75 Carriage of cargo including carry-on baggage

This section, currently § 135.117, would be redesignated as § 135.75. It would be amended to explicitly state that it applies to carriage of cargo on aircraft, as well as in aircraft. The word "occupants" would be substituted for the word "passengers" whever it appears in the present provisions in order to require protection for all persons in the aircraft. A new paragraph (c)(7) would be added to make paragraph (c)(4) not applicable to cargo only operations when certain emergency exit standards are met. In addition, a new paragraph (c)(6) would be added to require that cargo must be properly stowed for takeoff and landing. A new paragraph (d) would be added which would require each passenger seat under which baggage is stowed to be fitted with means of restraint meeting specified standards. This is intended to ensure that luggage will not impede emergency evacuation. A new paragraph (e) would be added to require cargo carried in cargo compartments to be loaded in such a manner as to permit entry of a crewmember to extinguish a fire.

Ref. Proposal Nos. 31 and 73, Part 135 Review; Proposal No. 783, OPS Review.

§ 135.77 Requirements for the use of oxygen

This section, currently § 135.83, would be redesignated as § 135.77. Since the present rule imposes the same requirements for both unpressurized and pressurized aircraft, and the use of supplemental oxygen relates primarily to cabin

pressure altitudes, it is believed no longer necessary to differentiate between pressurized and unpressurized aircraft at the altitudes referred to in paragraph (a). A pressurized aircraft, when it becomes depressurized or is being operated as an unpressurized aircraft, is for all practical purposes an unpressurized aircraft. Accordingly, paragraph (a) would be revised to apply to both pressurized and unpressurized aircraft.

Accumulated operating experience in turbojet-powered aircraft having pressurized cabins has shown the occurrence of sudden decompression to be very infrequent and if proper emergency procedures are followed, of no serious consequence up to the maximum altitudes now utilized as flight altitudes. Oxygen equipment has advanced in design to the point where it can and does meet the standards prescribed for the quick emergency use concept. Accordingly, paragraph (b) would be revised to reflect a level of safety equivalent to that of the present rule and in conformity with the supplement oxygen requirements of Part 121. Paragraph (b) would, however, remain specifically applicable to pressurized cabin aircraft.

§ 135.79 Oxygen for medical use by passengers

This section, currently § 135.114, would be redesignated as § 135.79 and would be amended to permit equipment for the storage, generation or dispensing of medical oxygen (other than in the form of a liquid), if of an approved type or in conformity with specific requirements of Title 49 CFR Parts 171, 172, and 173, except that there must be compliance with § 173.24(a)(1), governing the packaging, marking, labeling, and maintenance of oxygen, to be furnished by a person other than the certificate holder.

Concerning the use of liquid oxygen, the FAA believes that damage to dispensing equipment due to mishandling or during storage or servicing of liquid oxygen containers could result in malfunction of this equipment and could cause injury to persons on board the aircraft. Accordingly, the amendment as proposed would require that any liquid oxygen storage unit carried on board an aircraft under this section must have been maintained in accordance with an FAA approved maintenance program since its purchase new or since its last purging.

FAA has determined that a level of safety equivalent to that provided by the carriage of equipment furnished by the certificate holder and maintained in accordance with the certificate holder's approved maintenance program would be provided if a person trained in the use of medical oxygen is on board the aircraft to administer it during flight. Further, the FAA now believes that the requirement for a passenger to furnish a statement of need signed by a licensed physician may impose undue hardship on operators of flights carrying persons with a medical need for oxygen without contributing significantly to safety, particularly in connection with such flights conducted from remote areas. Accordingly, the requirement for a physician's statement would be deleted.

A new provision would be included to allow oxygen equipment furnished by a professional or emergency medical service to be carried on board an aircraft by a passenger requiring the use of oxygen in a medical emergency when accompanied by a person trained in the use of medical oxygen equipment. The FAA believes that portable oxygen equipment suitable for carriage on board an aircraft as used by professional or emergency medical services is given reasonable care and maintenance and may be safely carried and used on board an aircraft if a person trained in the use of medical oxygen is on board to administer it during flight. Accordingly, paragraph (d) as proposed would provide authority for deviation from specific provisions of paragraph (a)(1)(i) to permit the carriage and use of such oxygen equipment in a medical emergency when no other practical means of transportation is reasonably available and the person carried is accompanied by a person trained in the use of medical oxygen. Additionally, a new paragraph (e) would require each certificate holder who, under the authority of paragraph (d) deviates from the provisions of paragraph (a)(1)(i), to send a complete report of the deviation and the reasons for it to the certificate holding FAA Flight Standards District Office within 10 days. This should ensure that the emergency use of the deviation authority is not abused.

The FAA is aware of the objections of some persons in the past to the permissible carriage or use of oxygen equipment due to the difficulty in determining if the equipment has been properly serviced, altered, or repaired, or whether cleanliness has been observed in its servicing and whether it has been subjected to abuse and possible damage. However, there have been numerous instances under the present rule in which operators called upon to transport persons requiring use of oxygen and persons requiring such transportation, located in sparsely populated or remote areas, have been unduly burdened by the requirement that oxygen equipment used must be furnished by the certificate holder. In many such cases, the frequency of need for such transportation is not sufficient to justify the operator's expenditure to provide oxygen equipment for the limited use it would receive. The FAA is of the opinion that, except for liquid oxygen, the passenger should be permitted to provide the oxygen needed for an air ambulance flight under the conditions specified in this proposal.

The FAA believes that these proposed amendments would provide a measure of flexibility in the rule governing the carriage of oxygen for medical purposes, while providing a satisfactory level of safety. The standard of care in the operation of oxygen storage and dispensing equipment required by the provisions of this proposal in conjunction with the operating procedures specified in the certificate holder's manual would serve to ensure safety.

Ref. Proposal No. 30, Part 135 Review.

§ 135.81 Autopilot: minimum altitudes for use

This section, currently § 135.79, would be redesignated as § 135.81. The contents of the present section would be deleted and the contents of § 121.579 inserted in lieu thereof. The FAA believes that in upgrading the rules for air taxi certificate holders, regulations are needed to govern the approval of modern flight control guidance systems with automatic capability to touchdown. This proposal contains the safeguards the FAA deems necessary in view of the more complex aircraft which would be authorized under the terms of this proposal to operate under Part 135. However, since helicopters have historically been excepted from the minimum safe altitudes specified in the regulations for airplanes without adversely affecting safety, and autopilot or flight stabilization systems used in helicopters are more compatible with near surface operations than are many flight control guidance systems in airplanes, it is considered appropriate to except helicopters from the requirements of this section.

§ 135.83 Airmen: limitations on use of services

This section, currently § 135.33, would be redesignated as § 135.83. It would be revised to prohibit a certificate holder from using the services of any person as an airman unless that airman is qualified for the operation for which he is to be used and has the required appropriate and valid airman and medical certificate in his possession while engaged in operations under this Part.

Ref. Proposal No. 13, Part 135 Review.

§ 135.85 Aircraft and facilities for recent flight experience

This section, currently § 135.37, would be redesignated as § 135.85 and would be amended by deleting the words "those operations" and inserting the words "all operations for which the pilot is authorized" in place thereof. The purpose of the proposal is to ensure that each pilot employed by the certificate holder would be provided aircraft and facilities necessary to maintain and demonstrate his ability to conduct all operations for which the pilot is authorized.

Ref. Proposal No. 14, Part 135 Review.

§ 135.87 Composition of flight crew

This section, currently § 135.52, would be redesignated as § 135.87. It would be amended by deleting the word "airplane" in paragraph (b) and inserting the word "aircraft" in place thereof.

§ 135.89 Second in command required for IFR conditions

This section, currently § 135.73 would be redesignated at § 135.89. The references "135.75 and 135.77" would be

changed to read "135.91 and 135.93" respectively.

§ 135.91 Exception to second-in-command requirements: limited IFR conditions

This section, currently § 135.75 would be redesignated as § 135.91.

It would be amended by deleting the words "airplane" in both the lead-in paragraph and paragraph (a) and inserting the word "aircraft" in place thereof to make this section applicable to all aircraft. In addition, the reference "Section 91.116(f)," in paragraph (b)(2)(ii) would be changed to read "Part 91."

Ref. Proposal No. 21, Part 135 Review.

§ 135.93 Exception to second-in-command requirement: approval for use of autopilot systems

This section, currently § 135.77, would be redesignated as § 135.93 and would be amended by changing the word "airplane" wherever found to read "aircraft" to make the section applicable to all aircraft. Autopilots installed in airplanes have long been recognized as a means of reducing the workload on crewmembers, thereby enhancing safety. Recently, autopilot systems which afford similar capability and reliability have been developed for rotorcraft and provisions for their use would be included in this proposal.

Ref. Proposal No. 22, Part 135.

§ 135.95 Flight attendant crewmember requirement

This section, currently § 135.54 would be redesignated § 135.95 with no other changes.

§ 135.97 Pilot-in-command or second-in-command: designation required

This section, formerly § 135.35, would be redesignated § 135.97, with no other changes.

§ 135.99 Second-in-command required in Category II operations

This section currently § 135.72, would be redesignated § 135.99, with no other changes.

§ 135.101 Passenger occupancy of pilot seat

This section, currently § 135.53, would be redesignated § 135.101, with no other changes.

§ 135.103 Manipulation of controls

This proposed new section would ensure that the level of safety under Part 135 is not derogated by the manipulation of the controls of an aircraft while in flight by unauthorized persons.

Ref. Proposal No. 68, Part 135 Review.

§ 135.105 Briefing of passengers before flight

This section, currently § 135.81, would be redesignated as § 135.105. Paragraph (a) would be revised to require a pretakeoff briefing of passengers by the pilot in command on specified safety matters. A new paragraph (b) would be added to paragraph (a) to require the briefing to include the location and operation of fire extinguishers carried on board the aircraft. Additionally, a new paragraph (c) would be added which would permit use of a printed card to supplement the oral briefing.

Ref. Proposal No. 68, Part 135 Review; Proposal No. 760, OPS Review.

§ 135.107 Prohibition against carriage of weapons

This section, currently § 135.115, would be redesignated § 135.107 with no other changes.

§ 135.109 Alcoholic beverages

This section, currently § 135.115, would be redesignated § 135.109 with no other changes.

§ 135.111 Helicopter operations: emergency landing areas

This section, formerly § 135.89, would be revoked and the assigned section number would be reserved. The FAA was considering issuing an NPRM to propose an amendment of Part 135 to revoke this section in response to a petition for rulemaking submitted by the Helicopter Association of America (HAA). HAA stated that present § 135.89, which prescribes emergency landing areas only for helicopters engaged in air taxi operations within congested areas, discriminates against helicopters. The minimum safe altitude requirements prescribed in § 91.79 of the chapter apply to all aircraft including helicopters. The FAA has carefully reviewed the justification of § 135.89 and now believes that it is no longer necessary and that the minimum safe altitude provisions of § 91.79 provide an acceptable level of safety.

§ 135.113 Emergency and emergency evacuation duties

This new section would require each certificate holder to assign to each category of required crewmember appropriate functions to be performed in an emergency and during emergency evacuation. This would make clear to individual crewmembers the action expected of them in an emergency. Prior assignment of duties would tend to minimize the confusion which sometimes results from unexpected situations occurring during an emergency. The assigned functions would be described in the manual required by § 135.23.

Ref. Proposal No. 49, Part 135 Review.

SUBPART C—AIRCRAFT AND EQUIPMENT

§ 135.115 Applicability

This section, currently § 135.141 would be redesignated § 135.115 with no other changes.

§ 1351.17 General requirements

This section, currently § 135.143 would be redesignated as § 135.117. Paragraph (b) would be amended by applying the requirement that instruments and equipment be in operable condition only to single-engine aircraft. This is a conforming change resulting from the proposal in § 135.149 for a minimum equipment list for multiengine aircraft. Paragraph (c) would be revised by deleting obsolete date references.

§ 135.119 [Reserved]

§ 135.121 Aircraft proving tests

This section, currently § 135.32 would be redesignated § 135.121 with no other changes.

§ 135.123 Dual controls required

This section, currently § 135.149 would be redesignated § 135.123 with no other changes.

§ 135.125 Equipment requirements: general

This section, currently § 135.151, would be redesignated as § 135.125. In addition, it would be revised by deleting the substance of present paragraph (c) and the addition of new paragraphs (d) and (e) to allow the incorporation of new requirements appropriate to the more complex and high performance airplanes which would be authorized to operate under Part 135.

In this respect, the operational history of turbojet airplanes has shown that a third attitude instrument, powered from a source independent of the airplane's electrical generating system, is desired for maintaining control of the airplane and would provide a margin of safety not otherwise available in the event of total failure of the electrical generating system. Accordingly, the substance of current paragraph (c) would be deleted and pursuant to revised paragraph (c), requirements for a third attitude instrument would be inserted in place thereof to be applicable to all turbojet-powered airplanes.

Similarly, the lockable cockpit door requirement is believed appropriate for airplanes having a seating capacity of 10 passengers or more to ensure the security of the flight crew. It would also provide a more professional atmosphere by separating the flight crew from the passenger compartment.

The requirement for cockpit voice recorder (CVR), flight data recorder (FDR) and ground proximity warning systems (GPWS), in airplanes being operated under the rules of Part 135 has been under consideration for some time. The National Transportation Safety Board (NTSB) has recommended that GPWS, CVR, and FDR equipment be installed on all aircraft being used in commercial passenger service. The NTSB stated the GPWS would reduce the approach and landing accidents and the usefulness of the CVR and FDR during accident investigation would enhance safety.

In December 1976, the FAA issued two Special Federal Aviation Regulations (SFAR 30–1 and SFAR 33) allowing certain large airplanes with a maximum passenger capacity of 30 seats or less, a maximum payload of 7,500 pounds or less, and a maximum zero fuel weight of 35,000 pounds to be operated under Part 135 and 121 rules without a GPWS, CVR,

and FDR until June 30, 1978. This extension of time was necessary to provide both FAA and industry additional time to study the matter of these requirements and determine if requirements for this equipment should be included in the upgrade of Part 135. Although it is evident that certain benefits would be realized by the use of this equipment, the FAA does not believe, at this time, that the installation of this equipment in all commercial passenger carrying aircraft is warranted. The FAA, however, believes that consideration should be given to requiring the GPWS, CVR, and FDR equipment on turbojet-powered airplanes with 10 or more passenger seats, because of the complexity and high performance characteristics of those airplanes.

This proposal includes the CVR, FDR, and GPWS equipment requirements to give interested parties an opportunity to provide input as to whether or not this additional equipment should be required in Part 135 operations. Information regarding installation and maintenance costs are requested together with other pertinent comments. This information will provide FAA additional data for use in reaching a decision on the matter.

The FAA is of the opinion that the regulations must be responsive to improvements in technology. Accordingly, for this purpose and to achieve consistency within the regulations, a public address system and a crewmember interphone system is deemed necessary for aircraft having a passenger seating capacity of more than 19 utilized under Part 135.

Therefore, new paragraph (e) would contain requirements for an aircraft passenger seating capacity of more than 19 persons to have installed a public address system and a crewmember interphone system approved in accordance with § 21.305 and which meets the requirements of §§ 121.318 and 121.319, respectively.

§ 135.127 Fire extinguishers: passenger-carrying aircraft

This section, currently § 135.161, would be redesignated as § 135.127. It would be revised to provide that the type and quantity of extinguishing agent must be suitable for the kind of fires likely to occur. In addition, it would require that at least one hand fire extinguisher be located on the flight deck for use by the flight crew and that at least one hand fire extinguisher be located in the passenger compartment of aircraft seating between 6 and 30 passengers, inclusive.

Ref. Proposal No. 815, OPS Review.

§ 135.129 Oxygen equipment requirements

This section, currently § 135.165, would be redesignated as § 135.129, and revised to require a pressure demand oxygen breathing system for flight operations at altitudes in excess of flight level 410, capable of supplying flight crewmembers a specified minimum mass flow of oxygen. Current operating experience with turbojet airplanes having pressurized cabins has shown the frequency of occurrence of sudden decompression to be very insignificant and of no serious consequence to the maximum altitudes now authorized. However, in view of the expanded use of turbojet aircraft in general aviation operations and their certification for operation at altitudes for which there is no operating experience, the FAA believes additional requirements concerning pressure demand oxygen breathing equipment is necessary to ensure an acceptable level of safety in Part 135. The need for oxygen in such operations far outweighs any economic burden that may be involved in the installation and maintenance of the oxygen dispensing equipment.

The requirement for a minimum of 83.8 mm. HG. of inspired oxygen partial pressure has been verified by human experimentation under ideal conditions. The practical application of this minimum, however, depends on human tolerance which diminishes rapidly as altitude increases. Above flight level 410, both the time element of useful consciousness and human tolerance become extremely critical and are deserving of the utmost consideration.

Because the requirements for the use of oxygen relate primarily to cabin pressure altitudes in both unpressurized and pressurized aircraft, as is the case under proposed § 135.77, it is considered appropriate to consolidate the requirements of the current rule and make these requirements applicable to both classifications of aircraft. Provisions also would be included requiring enough oxygen dispensers and oxygen to supply the oxygen required by § 135.77. Additionally, certain equipment standards would be required including a means to allow the flightcrew to readily determine, in flight, the amount of oxygen available and whether the oxygen is being delivered to the dispensing units, and to allow the flightcrew to use undiluted oxygen at their discretion.

§ 135.131 Equipment requirements: carrying passengers at night or under VFR over-the-top conditions

This section, currently § 135.153, would be redesignated as § 135.131. It would be amended by deleting the word "airplane" in paragraph (a) and inserting the word "aircraft" in place thereof. At the time § 135.153 was promulgated in 1964, the airplane was the only aircraft category for which full IFR certification was available. This situation no longer exists in view of the fact that several models of helicopters have now been certificated for full IFR operation. Therefore, since the substance of paragraph (b) is no longer appropriate, this paragraph would be deleted.

In line with the overall amendment of Part 135 and the FAA's desire to increase the level of safety in the broad scope of operations under this rule, it is considered appropriate to delete the exception currently provided in paragraph (c) of § 135.153. Therefore, paragraph (a) would be amended by deleting the words "Except as provided in paragraph (e) of this section," and paragraph (c) would be deleted. The section would then be relettered as shown.

§ 135.133 Radio and navigational equipment: carrying passengers under VFR at night, or over-the-top

This section, currently § 135.157, would be redesignated as § 135.133. Pursuant to revised paragraphs (a) and (b), it would specify radio communications and navigation equipment requirements for the carriage of passengers under VFR at night or over the top. The title would be revised accordingly. The word "airplane" in paragraph (a) would be deleted and the word "aircraft" inserted in place thereof to broaden the applicability of the proposed revision. All other provisions of the current rule would be deleted in their entirety. In the opinion of the FAA, the deleted portions of this rule have been difficult to enforce and are of questionable value from a safety standpoint.

§ 135.135 Equipment requirements: aircraft carrying passenger under IFR

This section, currently § 135.155, would be redesignated as § 135.135. In addition, this section would be amended by deleting the word "airplane" wherever it appears and inserting the word "aircraft" in place thereof, and by deleting the words "After March 6, 1965," in paragraph (e). The proposed amendment would broaden the scope of this section by making it applicable to all aircraft and delete a date reference no longer pertinent.

§ 135.137 Radio and navigational equipment: extended overwater or IFR operations

This section, currently § 135.159, would be redesignated as § 135.137. In addition, this section would be revised to set forth additional radio and navigational equipment requirements for the carriage of passengers in turbojet airplanes, airplanes capable of carrying 10 passengers or more, and multiengine airplanes being operated in commuter air service. Without a revision to this section, complex operations, such as those listed above, would be permitted to operate under IFR with but a single transmitter and two independent receivers for communications and navigation, since under the current rule two transmitters are required only for extended overwater operations. Under the present rule, the two independent navigation receivers need not be VOR receivers. The FAA believes that it is essential to have installed two transmitters and two navigational receivers capable of using the VOR as a means of navigation under IFR or in extended overwater operations. Therefore, paragraph (a), as revised, would be made applicable to turbojet airplanes, airplanes having a passenger seating capacity, excluding any pilot

seat, of 10 seats or more, and multiengine airplanes carrying passengers being operated by a "commuter air carrier" as defined in Part 298 of the Board's regulations and would require at least two transmitters and two independent VOR receivers for navigation. Under the proposed revision, current paragraph (a)(7) and the flush paragraph immediately following it in the current rule would be deleted.

A new paragraph (b) would apply to all other aircraft. A new paragraph consisting of current paragraph (b) and the flush paragraph deleted above would be designated as paragraph (c) and amended as necessary to reference both paragraphs (a) and (b), as revised.

§ 135.139 Emergency equipment: extended overwater operations

This section, currently § 135.163, would be redesignated as § 135.139. This section would be rearranged as necessary to include proposed changes. It would be amended by revising paragraph (a) to prohibit the operation of an aircraft in extended overwater operations unless it carries a life preserver equipped with an approved survivor locator light, or another approved means of flotation, for each occupant of the aircraft. As proposed, the aircraft would be required to have installed enough life rafts of sufficient buoyancy to carry all occupants of the aircraft. These life rafts must contain at least the equipment currently listed in paragraphs (a)(2)(i) through (a)(2)(xix) clearly marked for easy identification.

Numbered paragraphs (a)(1) through (a)(19) would be redesignated as necessary for the rearrangement of this section. Pursuant to redesignated paragraph (a)(2)(xiv), a flashlight having at least two size "D" cells or equivalent would be required to ensure that an adequate source of light would be provided in an emergency situation. The date deference presently contained in paragraph (b) along with a portion of this paragraph, no longer appropriate, would be deleted.

These proposed changes would incorporate into Part 135 new and revised standards concerning emergency equipment requirements in extended overwater operations. These requirements are believed essential to the safety of persons carried on board an aircraft during extended overwater operations.

§ 135.141 Additional airworthiness requirements: certain large airplanes and ten or more passenger small airplanes

The section, currently § 135.144, would be redesignated as § 135.141. In addition, it would be amended to require large airplanes to meet certain additional special airworthiness requirements of Part 121 and require that after June 30, 1984, all reciprocating-engine and turbo-propeller powered small airplanes configured for ten or more passenger seats intended for use in operation under Part 135 be type certificated in the transport category. Specific phase-out dates would be established as set forth in the proposal. This is the final step of the regulatory program begun in July 1970 to upgrade the level of airworthiness for airplanes in Part 135 operations.

The FAA has determined that the present requirements which were established to upgrade the airworthiness standards of aircraft used in Part 135 operations, have served their purpose. This amendment sets forth a procedure for an orderly deletion of the three step regulatory program initiated in July 1970.

This program was designed to accomplish the phaseout of aircraft used in passenger-carrying service not certificated in the transport category. New paragraphs (c), (d), and (e) of this proposal would regulate the phaseout of the aircraft affected from operations under Part 135. The FAA has become aware of the increased utilization of a number of aircraft in operations under Part 135 by conversion to high-density seating which do not meet the certification requirements for transport category. Further, it is widely recognized that the modification of such aircraft to increase the passenger-carrying capacity decreases the performance to a marked degree. Therefore, the FAA is proposing a phaseout of any aircraft not certificated under transport category from operations under Part 135. The FAA believes that passenger safety far outweighs any mitigating factor which may otherwise be considered.

Proposed paragraph (c) would prohibit the introduction into Part 135 operation of small airplanes that—

(1) Have not been type certificated to Part 25,

(2) Have been type certificated with a seating configuration of 10 or more passengers, and

(3) Have never been operated under Part 135.

Proposed paragraph (d) would limit the passenger seating configuration of aircraft presently approved for Part 135 operations and having a seating capacity of 10 or more to the maximum seating capacity approved prior to August 19, 1977, for Part 135 operations. The FAA believes this proposal is necessary in order to upgrade the level of safety in Part 135 operations.

§ 135.143 Shoulder harness installation at flight crewmember stations

This new section would require that all turbojet aircraft or aircraft having a passenger seating capacity, excluding any pilot seat, of 10 seats or more be equipped with shoulder harnesses at the pilot-in-command and second-in-command pilot stations and that the shoulder harness must be worn by those flight crewmembers during takeoffs and landings unless the crewmember cannot perform his required duties with the shoulder harness fastened. The FAA is aware of the difficulty in installing shoulder harnesses in many of the present aircraft now in service.

However the FAA has determined, based on an evaluation of the expected benefits, that a significant improvement in the safety of occupants of aircraft covered by this proposal would be gained by the installation of shoulder harnesses at the pilot-in-command and second-in-command stations. The FAA is convinced that crewmembers restrained and protected by shoulder harnesses would be less likely to suffer injury in the event of an incident or accident occurring during takeoffs or landings and therefore would be more able to provide assistance to passengers in an emergency. The exception regarding inability to perform duties would take into consideration differences in the human anatomy and allow discretionary compliance by the crewmember when such human considerations would preclude the use of shoulder harnesses.

§ 135.145 Airborne thunderstorm detection equipment requirements

This new section would be incorporated into Part 135 to require that airborne thunderstorm detection equipment (such as radar) be installed and operative in multiengine aircraft having a passenger seating configuration excluding any pilot seat, of 10 seats or more when used in passenger carrying operations. The operational history of accidents involving serious injury or death to passengers of aircraft traversing severe weather areas is such that the requirement for equipment to detect thunderstorms is necessary.

The FAA is of the opinion that this equipment requirement will contribute to greater safety in operations since it will facilitate the early detection and location by the pilot of severe weather and enable him to avoid these areas or take other action necessary in the interest of safety. The geographical exclusions proposed are identical to the exclusions contained in § 121.357 of this chapter.

Ref. Proposal No. 75, Part 135 Review.

§ 135.147 Emergency equipment: more than 19 passenger airplanes

This new section would be incorporated into Part 135 to require certain emergency equipment aboard aircraft having a passenger seating capacity of more than 19 when used under this part and to provide for the inspection of that equipment. This equipment is considered the minimum necessary in order to provide adequately for the emergency needs of passengers when more than 19 passengers are carried in an aircraft.

Ref. Proposal No. 48A, Part 135 Review.

§ 135.149 Inoperable instruments and equipment for multiengine aircraft

§ 135.143, in part, currently prohibits operations unless all required instruments and equipment are in an operable condition. Part 135 does not, however, currently provide for the use of a Minimum Equipment List (MEL), as does Part 121, to allow operations under certain conditions with inoperable equipment and instruments. Because of this, Part 135 operators have been subjected to a significant burden since they are required to make expedited repairs

to provide scheduled service. In addition, passengers have been subjected to traveling delays because of the requirement to repair inoperable equipment that was not needed for the particular flight.

Based on information received as a part of this review program and on satisfactory experience with the use of MELs under Part 121, the FAA believes that Part 135 can be revised to provide for the use of MELs for multiengine airplanes operated under Part 135 without adversely affecting safety so long as certain conditions and limitations are met. Accordingly, it is proposed that a new § 135.149 be adopted to provide for the use of MELs under Part 135. Proposed §135.149(a) specifies certain kinds of equipment and instruments that are not amenable to placement on an MEL; and therefore those items must always be in an operable condition. Paragraph (b) of proposed § 135.149 specifies procedures to be followed in obtaining and using the MEL. It should be noted that, under this paragraph, the operator using the MEL would also hold a supplemental type certificate (STC) covering the MEL and, therefore, would be subject to the requirements of FAR Part 21 applicable to STC holders including those related to reporting of defects in § 21.3 and required design changes under § 21.99.

In connection with this proposal, reference should be made to Airworthiness Review Notice No. 4 (40 FR 22112; May 20, 1975) regarding present § 135.143. That proposal is still under consideration.

§ 135.151 Performance requirements: aircraft operated over the top or in IFR conditions

This section, currently § 135.145, would be redesignated as § 135.151. In addition, the word "airplane" would be deleted wherever it appears and the word "aircraft" inserted in place thereof in order to make the section applicable to the increasing number of rotocraft certificated for IFR flight.

Paragraph (b)(1) would be amended by the insertion of the words "or any combination thereof" between the words "forecasts" and "indicate" to provide for the use of more weather related information to determine the probability of flight under VFR. In addition, this paragraph would be amended by inserting the word "reporting" between the words "every" and "point" to clarify the intent of the requirement and provide a more realistic basis on which to base operating decisions.

§ 135.153 Performance requirement: land aircraft operated overwater

This section, currently § 135.147, would be redesignated § 135.153 with no other changes.

§ 135.155 Small airplane performance operating limitations

This section, currently § 135.148, would be redesignated as § 135.155. In addition, the references to sections of Part 121 would be changed to Part 135 references, as appropriate, in view of incorporation in Part 135 of operating limitations derived from Subpart I of Part 121. It should be noted that the applicability of this rule to small airplanes as defined in Part I remains unchanged from its applicability in former § 135.148.

§ 135.157 Empty weight and center of gravity: currenty requirements

This section, currently § 135.167 would be redesignated as § 135.157. The words "3 years" would be deleted where used and the words "36 calendar months" inserted in place thereof to avoid confusion by operators, to provide flexibility in the requirement, and to be consistent with other time requirements within this chapter.

Ref. Proposal No. 41, Part 135 Review; Proposal No. 819, OPS Review.

SUBPART "D"—VFR/IFR OPERATING LIMITATIONS AND WEATHER REQUIREMENTS

§ 135.159 Applicability

This section states the applicability of Subpart D, VFR/IFR flight operations and associated weather requirements for operations under Part 135.

§ 135.161 VFR: minimum altitudes

This section, currently § 135.91, would be redesignated § 135.161 without other changes.

§ 135.163 VFR: visibility requirements

This section, currently § 135.93, would be redesignated § 135.163 without other changes.

§ Part 135.165 VFR: helicopter surface reference requirements

This section, currently § 135.95, would be redesignated as § 135.165. Since helicopters are frequently operated over water as well as land, the word "ground" would be deleted wherever it appears and the word "surface" inserted in place thereof.

§ 135.167 VFR: fuel supply

This section, currently § 135.97, would be redesignated as § 135.167. In addition, paragraph (a)(2) would be amended by deleting "1 hour" and inserting "45 minutes" in place thereof. It would reduce the fuel requirement for VFR night operations to sufficient fuel to fly to the first point of intended landing, considering normal fuel consumption, and to fly thereafter for at least 45 minutes. The FAA believes that because of the increased cruise speed factor present in light airplanes and the availability of airports, this requirement would provide an acceptable fuel reserve under night VFR conditions.

Ref. Proposal Nos. 769 and 770, OPS Review.

§ 135.169 VFR: over-the-top carrying passengers: Operating limitations

This section, currently § 135.99, would be redesignated as § 135.169. The reference to § 135.145 would be deleted and § 135.151 would be inserted in place thereof. In addition, it would be amended to permit the use of either weather reports or forecasts or any combination thereof in determining the weather conditions expected en route.

§ 135.171 Weather reports and forecasts

This section, currently § 135.65, would be redesignated as § 135.171. In addition, this section would be revised to authorize the use of weather sources approved by the U.S. National Weather Service or approved by the Administrator and to make it clear that weather observations made and furnished to a pilot who is or will be conducting IFR operations at an airport must actually be taken at that airport rather than at some point near that airport. However, under paragraph (b), operations specifications may be issued permitting weather observations to be taken at a location other than on the airport if the Administrator finds that safety so permits. This would provide relief in cases where there is more than one airport with an approved instrument approach procedure in a control zone and only one such airport has a weather reporting station. The issuance of such operations specifications would be contingent upon historical experience establishing that the weather conditions at the airport having a weather reporting facility do not differ significantly from the weather conditions at the airport not having a weather reporting facility.

Current § 135.65 uses the term "accredited observer." Since that term is not defined in this chapter, it is deleted.

Ref. Proposal No. 20, Part 135 Review; Proposal No. 750, OPS Review.

§ 135.173 [Reserved]

§ 135.175 IFR: operating limitations

This section, currently § 135.101, would be redesignated as § 135.175. In addition, this section would be amended to permit a Part 135 certificate holder authorized to operate, under IFR, outside of controlled airspace to utilize approved instrument approach procedures at airports which are located in controlled airspace and to depart airports that do not have approved instrument procedures when the Administrator determines that such operations can be conducted safely. This procedure would be applicable only where the overlying airway structure, adjacent navigational facilities, and terrain considerations would permit such operations to be conducted safely.

Ref. Proposal No. 25, Part 135 Review.

§ 135.177 IFR: takeoff minimum

This section, currently § 135.103. would be redesignated § 135.177 without any change.

§ 135.179 IFR: destination airport weather minimums

This section, currently § 135.105, would be redesignated as § 135.179. It would be amended to include a prohibition against commencing an over-the-top operation in flight unless the weather conditions at the next airport of intended landing will be at or above IFR minimums at time of arrival.

Ref. Proposal No. 27, Part 135 Review, Proposal No. 773, Operations Review.

§ 135.181 IFR: alternate airport weather minimums

This section, currently § 135.109, would be redesignated as § 135.181. Additionally, it would be revised to permit the use of "weather reports and forecasts or any combination thereof", and to base the designation of an alternate airport, when necessary in operations under Part 135, on weather conditions expected at that airport at the estimated time of arrival. This proposed change is consistent with other related changes concerning the use of aviation weather services for operations under Part 135 and will provide a degree of flexibility without derogating from safety.

§ 135.183 IFR: alternate airport requirements

This section, currently § 135.107, would be redesignated as § 135.183. In addition, this section would be amended by revising the IFR alternate airport requirements to require that a specified amount of fuel be carried and to allow the use of a combination of weather reports and forecasts to provide greater latitude in the selection of an alternate airport. Paragraph (b) would provide that fuel to fly to the alternate airport would not be required if there is a Part 97 SIAP for the first airport of intended landing and certain ceiling and visibility minimums will exist from at least one hour before until one hour after the estimated time of arrival. Safety will not be adversely affected by these proposed changes because the alternate airport weather should always be equal to or better than basic VFR weather minimums of a ceiling of 1,000 feet and visibility of 3 miles.

Ref. Proposal Nos. 609 and 775, Ops. Review.

§ 135.185 IFR: take off approach, and landing minimums

This section, currently § 135.111, would be redesignated as § 135.185 and would be substantially amended. Under paragraph (a), no pilot may begin an instrument approach unless the airport has designated weather reporting facilities and the latest weather report indicates the weather is at or above IFR minimums. The weather reporting facility must be operated by the U.S. National Weather Service, a source approved by it, or a source approved by the Administrator. Paragraph (b) would be revised to prohibit a pilot from beginning the final approach segment of an instrument approach procedure at an airport unless the U.S. National Weather Service, a source approved by the U.S. National Weather Service, or a source approved by the Administrator, issues a weather report for that airport and unless the latest such weather report indicates that weather conditions are at or above the authorized IFR landing minimums for the airport where the approach is being conducted. A new paragraph (c) would be incorporatd in this section to outline the specific conditions under which a pilot may continue an instrument approach procedure, once initiated. Current paragraphs (c) and (d) would be redesignated as paragraphs (d) and (e) respectively. New paragraphs (f), (g) and (h) would be added to provide Part 135 certificate holders authority for lower than standard takeoff minimums by operations specifications when approved by the Administrator. Part 135 takeoff minimums are now published in the National Ocean Survey (NOS) and certain other instrument approach procedure charts/publications.

Ref. Proposal No. 29, Part 135 Review; Proposal Nos. 778 and 779, OPS Review.

§ 135.187 Icing conditions: operating limitations

This section, currently § 138.85, would be redesignated as § 135.187 and revised to make paragraphs (b) and (c) applicable to aircraft rather than airplanes, to delete the intensity conditions "light," "moderate," and "severe" as currently applied in the section, and to define the degree of ice protection required for flight under both VFR and IFR.

As proposed, pargaraph (a) (1) would be amended by the deletion of the words "rotorblade" and "propeller" from the list of aircraft components on which the adherance of frost, snow, or ice would prohibit takeoff. Paragraph (a) (3) would be revised to read as follows: "Any frost adhering to the wings, or stabilizing or control surfaces, or rotors or propellers of the aircraft, unless the wings, or stabilizing or control surfaces, or rotors or propellers have been smoothed to prevent the disruption by the frost of airflow over such surfaces." The revised paragraph would be more closely aligned with the intent of this section concerning the action necessary to treat frost adhering to the surface of an aircraft to permit a takeoff.

Paragraph (b) would be amended to prohibit takeoff for flight under VFR, or the continuation of flight under VFR, into known or forecast icing conditions unless the aircraft has installed functioning deicing or anti-icing equipment protecting each rotor blade, propeller, windshield, wing, stabilizing or control surface, and each airspeed, altimeter rate of climb, or flight altitude instrument system. The FAA believes it unnecessary to specify limiting icing conditions such as "light" or "moderate" for VFR flight operations if functioning deicing or anti-icing equipment is installed to protect the components of the aircraft on which ice accretion or formation would adversely affect its safety. Normally, there is ample opportunity to terminate VFR operations if icing of an intensity that would pose a hazard to the aircraft is reported, forecast, or encountered in flight.

Paragraph (c), as revised, would prohibit takeoff for flight under IFR, or the continuation of flight under IFR, into known or forecast icing conditions without regard to the intensity of the icing conditions unless the aircraft has installed functioning de-icing or anti-icing equipment which meets the certification requirements of Section 34 of SFAR No. 23, or Part 23 effective November 19, 1973, or the certification standards for transport category aircraft concerning ice protection. Under these certification requirements, it must be shown, among other things, that the aircraft is able to safely operate in maximum continuous and intermittent maximum icing conditions determined as specified in the appropriate airworthiness certification regulations. The FAA believes these standards have proven adequate operational use under Part 121 and should be made applicable to Part 135. Current paragraph (d) would be retained as written to allow for changing weather conditions that obsolete a forecast before the next forecast is issued.

§ 135.189 Airport requirements and emergency lighting

This section, currently § 135.87, would be redesignated as § 135.189. Under the proposed change, the current rule would be deleted in its entirety and a new rule consisting of paragraphs (a) through (c) would be inserted in lieu thereof. Pursuant to paragraph (a) of the proposed revision, the certificate holder would be prohibited from using any airport unless it is properly equipped and adequate for the proposed operation, considering such items as size, surface, obstructions, facilities, public protection, and lighting. This provision is similar to the airport requirements of § 121.117 with the exception that navigational, and communications, and ATC items are not included to avoid preventing the use of a considerable number of general aviation airports where there are currently no navigation, communications, or ATC aids. In considering the requirements for a takeoff and landing site in operations under this part, the FAA believes the items listed are the minimum items needed to ensure an acceptable level of safety.

Pursuant to paragraph (b) of the proposed revision, except in case of an emergency, no person would be permitted to take off or land at night using flare pots or lanterns to mark or illuminate the take off or land at night using flare pots needed to preclude the routine use of flare pots or lanterns without imposing an undue burden on operations in remote areas where no other suitable means of airport lighting is available. Paragraph (c) as proposed would provide specific light spacing requirements for the emergency use of flare pots or lanterns to ensure that the takeoff or landing area is sufficiently illuminated when such lighting is used.

Pursuant to paragraph (d) of the proposed revision, except in case of an emergency, night takeoffs and landings in a large or turbojet-powered airplane would not be permitted when flare pots or lanterns have been substituted for more than 25 percent of the runway edge lights for the runway to be used. The FAA believes that more rigid requirements are necessary for the large and more complex airplanes which may be operated under the rules of this Part. On the other hand, it is believed unnecessary to apply the same requirements to large or turbine-powered helicopters because of the

limited takeoff and landing area needed for such aircraft. Consequently, the rule as proposed would apply only to large or turbojet-powered airplanes.

Paragraph (e) as proposed would, except in case of an emergency, limit the lighting which may be used to illuminate a takeoff and landing area to flare pots and lanterns, and such other lighting as approved by the Administrator. This provision would preclude the use of lights from an automobile and other similar types of lighting which the FAA believes would be detrimental to safety.

SUBPART E—FLIGHT CREWMEMBER REQUIREMENTS

§ 135.191 Applicability

This proposed new section would prescribe the flight crewmember requirements for operations under this Part.

Pilot-in-command and second in command crewmember qualifications are currently prescribed in Subpart D, §§ 135.121, 135.123, 135.125, and 135.127, respectively, among others. However, the FAA believes that these qualifications as prescribed, should be revised to relate more specifically to VFR/IFR operating conditions without regard to night or VFR over-the-top operating conditions as currently prescribed.

Accordingly, the above sections would be deleted and new qualifications prescribed by consolidating certain of these requirements into the new qualification requirements of Subpart E as proposed herein.

§ 135.193 Pilot in command qualifications

This proposed new section would prescribe pilot-in-command qualifications for both VFR and IFR operations under Part 135. As proposed, pertinent requirements of current §§ 135.121, 135.123, and 135.125 would be combined into one new section. The remaining and redundant requirements of the current sections would be deleted.

The FAA believes that it would be justified in requiring pilots of certain classifications of aircraft to possess an airline transport pilot certificate in order to serve as pilot in command under Part 135. This requirement, based in part on operational complexity and the number of persons carried, would provide a level of safety more comparable to that provided by Part 121. Accordingly, pursuant to paragraph (a) as proposed, in passenger-carrying operations, pilots in command of turbojet-powered airplanes, pilots in command of airplanes capable of carrying ten persons or more, and pilots in command of multiengine airplanes being operated in commuter air carrier service, must hold an airline transport pilot certificate with appropriate category and class ratings and, if required, an appropriate type rating for that aircraft.

Pursuant to paragraph (b) with respect to all other aircraft, a person serving as pilot in command under VFR would be required to hold a commercial pilot certificate with appropriate category and class ratings and, if required, an appropriate type rating for the aircraft flown. Additionally, the pilot must have at least 500 hours of flight time as a pilot, including at least 100 hours of cross-country flight time, at least 25 hours of which were at night, and, in the case of an airplane, he must hold an instrument rating or an airline transport pilot certificate with an airplane category; or, in the case of helicopter operations conducted VFR over-the-top, the pilot in command must hold a helicopter instrument rating or an airline transport pilot certificate with a category and class rating for helicopters not limited to VFR.

Pursuant to paragraph (c), with respect to all other aircraft, a person serving as pilot in command under IFR would be required to hold a type rating, if appropriate. This would also be the case for all turbojet and large airplanes since a type rating is required in such aircraft under § 61.31(a) of Part 61. The flight hour requirements of current § 135.125 would be retained and, in the case of an airplane, an instrument rating or an airline transport pilot certificate with an airplane category rating would be required. The requirement for 10 night takeoffs and landings would be deleted. In the case of a helicopter, a helicopter instrument rating or an airline transport pilot certificate with a category and class rating not limited to VFR would be required.

The FAA believes these qualification requirements are appropriate for the operations listed and will provide the degree of safety required in operations conducted under Part 135.

§ 135.195 [Reserved]

§ 135.197 Second in command qualifications

This proposed new section would prescribe second in command qualifications for flight operations under the rules of Part 135. This proposal is substantially the same as current § 135.127, except that the words "when a second in command is required by this chapter" have been deleted and, accordingly, any person who acts as second in command of an aircraft would be required to hold an appropriate category and class rating.

Ref. Proposal No. 786, Part 135.

§ 135.199 Pilot qualifications: recent experience

Part 135 does not currently prescribe pilot flight crewmember recent experience requirements, nor do the recent experience requirements of § 61.57 apply to operations conducted under Part 135 since such operations are specifically excepted by § 61.55(c). Therefore, this proposal, patterned after § 61.57, would prescribe recent experience requirements of three takeoffs and three landings in category, class, and type, as appropriate, within the preceding 90 days, before a person may serve as a pilot flight crewmember in operations under Part 135.

Ref. Proposal No. 707, OPS Review

SUBPART F—FLIGHT CREWMEMBER FLIGHT AND DUTY TIME LIMITATIONS REST REQUIREMENTS

§§ 135.200 through .221 Flight and duty time limitations rest requirements

This section, currently § 135.135, would be redesignated as a new Subpart F. Additionally, this subpart would be amended to include definitions of some of the more commonly used terms in Subpart F. It is expected that specific definitions will be an aid in eliminating extensive interpretations. Moreover, the FAA has determined that its traditional interpretation of what constitutes a valid rest period is needed herein so that each crewmember is given an opportunity to obtain sufficient rest without interruption to ensure his fitness for duty aloft. Accordingly, it is proposed to amend the flight time limitations requirements to include the definition of a "rest period" to mean a continuous period of time required by this subpart during which a crewmember is not on duty and is not required or obligated to perform any work for the certificate holder. The rest period does not include time spent in dead head transportation.

Limitations are proposed on the amount of flight time which may be accumulated in certain specified periods. The FAA believes that the flight time limitations proposed herein affecting flight crew assignments are reasonable in view of its knowledge of human factors and flight schedule patterns for all classes of operators under Part 135.

Flight crewmembers would also be relieved from duty for at least 24 consecutive hours during any seven consecutive days.

In recognition of the fact that some Part 135 certificate holders may wish to utilize augmented flight crews, Subpart F would prescribe limitations on the use of relief pilots comprising augmented flight crews.

Additionally, a condition would be added to provide for a maximum of 2 hours of extended duty time if the excess is due to reasons beyond the control of the certificate holder. The FAA believes that a 2 hour time interval would provide for a reasonable period of unanticipated en route delay.

The FAA's basic concern in prescribing flight and duty time limitations for flight crewmembers under Part 135 is that these limitations be realistic in consideration of current industry state-of-the-art, that crewmember rest periods not be infringed upon by any other duty assigned by the certificate holder; and that the flight time as opposed to the duty time be clearly defined.

Ref. Proposal Nos. 37 and 76, Part 135 Review; Proposal Nos. 791, 793, and 799, OPS Review.

SUBPART G—CREWMEMBER TESTING REQUIREMENTS

§ 135.223 Applicability

This subpart prescribes requirements for the tests and checks which would be required to be administered to pilot and flight attendant crewmembers, and per-

sons issued check pilot authorization in operations under this Part.

§ 135.225 Initial and recurrent pilot testing requirements

This section currently, § 135.138, would be redesignated as § 135.225. Paragraphs (1) through (8) of paragraph (a) are believed to be representative of the scope of the initial and recurrent training program as proposed under new Subpart H, in which this section is included. Therefore, paragraph (a) would remain unchanged. However, in keeping with the FAA's express intent to upgrade Part 135 more in line with Part 121, paragraph (b) would be amended by deleting all references to maneuvers as set forth in Part 61 and related advisory circulars for pilot certification in the class of aircraft the pilot is to operate and, in lieu thereof, would permit the extent of the flight check, amended to read "competency check" where used throughout, to be determined by the Administrator. With respect to the term "competency check," the FAA considers this term more in keeping with present industry standards. An explanation would be added to paragraph (b) as proposed, to provide that for the purposes of this paragraph, type as used with respect to an airplane herein, means any one of a group of airplanes determined by the Administrator to have a similar means of propulsion, the same manufacturer, and no significantly different handling or flight characteristics.

Operational history and other empirical data has confirmed field and industry comments that as long as stringent training and oral or written tests are required for each type of multiengine airplane to be flown, then flight checks need be required in only one of a group of representative types without a degradation in the level of safety. This would also provide economic relief to the industry and conserve valuable energy.

The reference to § 135.131 in paragraph (c) would be deleted and § 135.229 would be inserted in place thereof. The words "6-month instrument" as used in paragraph (c) would be deleted and the words "instrument proficiency" inserted in lieu thereof to coincide with a similar change in § 135.229. Paragraph (e) would remain unchanged. A new paragraph (f) would permit portions of a required flight check to be given in an aircraft simulator or other appropriate device if approved by the Administrator.

§ 135.227 Initial and recurrent flight attendant crewmember testing

This section, currently § 135.139, would be redesignated as § 135.227. Paragraph (i) was added to present § 135.139 by amendment 135–44, issued on April 7, 1977 (41 FR 56280).

§ 135.229 Pilot in command: instrument proficiency check requirements

This section, currently § 135.131, would be redesignated as § 135.229. In keeping with present industry standards and related changes in other sections of Subpart H, the word "proficiency" would be inserted between the words "instrument" and "check" where appropriate throughout this section. Paragraph (c) would be amended to allow a flight check under actual IFR conditions. By an editorial change, the reference to § "135.138" would become § 135.225. Paragraph (c) would be further amended by adding the specification that the instrument proficiency check must include the procedures and maneuvers set forth for an airline transport pilot certificate in the particular type of airplane, if appropriate, in the case of a pilot in command of an airplane under § 135.193(a) and the procedures and maneuvers set forth for a commercial pilot certificate and an instrument rating and, if required, for the appropriate type rating, for all other pilots.

Paragraphs (d) and (e) would be unchanged except for the addition of the word "proficiency" between the words "instrument" and "check", where used.

Paragraph (f) would be amended by the addition of the word "proficiency" between the words "instrument" and "check" and by adding a provision to provide that the Administrator may authorize the use of a simulator or other training device to conduct portions of a check required by this section. This recognizes the advances in simulator or training device technology.

Paragraph (g) would be amended by the addition of a new paragraph (3) to require a demonstration of proficiency in the use of an autopilot once each 12 calendar months instead of once each 6 calendar months, as now required. In this respect, operating experience has shown that pilots generally retain their proficiency in the use of autopilots.

Paragraph (h) would remain unchanged except for the addition of the word "proficiency" between the words "instrument" and "check."

Ref. Proposal No. 789, Ops. Review.

FAR 135.231 Pilot In Command: line checks: routes and airways

This section, currently § 135.122, would be redesignated as § 135.231. It would be revised to incorporate requirements for a line check for pilots in command who are assigned to conduct VFR operations only and a line check for pilots in command who are assigned to conduct IFR operations. These line checks would be required annually and must be conducted over a portion of a route or airway and include takeoffs and landings at representative airports the pilot in command would normally be expected to use. The line checks must be given by an approved check pilot who is qualified in the aircraft used or by the Administrator, who must determine whether the pilot being checked satisfactorily performs the duties and responsibilities of a pilot in command in operations under Part 135, and so certify in the pilot's training record.

In addition to the line check requirement for pilots in command as noted, the certificate holder required to have a manual by § 135.23 would be required to establish, in that manual, a procedure for each pilot who has not flown over a route and into an airport within the preceding 90 days to familiarize himself with all available information concerning the route or airport, as the case may be, before conducting flight operations over that route or into that airport. Additionally, each qualifying pilot would be required to show to the satisfaction of the Administrator that he has adequate knowledge concerning the specific areas in which preflight preparation is believed essential.

In brief, the requirements of this section are designed to provide the check pilot or the Administrator with an opportunity to judge adequately a routine flight operation in terms of compliance with safe operating practices during preflight, takeoff, en route, and approach and landing.

Ref. Proposal No. 65, Part 135 Review.

§ 135.233 Crewmember tests and checks; grace provision; training to accepted standards

This section, currently § 135.133, would be redesignated as § 135.233. In addition, this section would be amended to delete the present reference to recurrent training since a similar provision, applicable to such training would be included under proposed § 135.239 of Subpart H.

There are currently no provisions in Part 135 to permit a person giving a pilot check under this Part to give additional training to a pilot who fails any of the required maneuvers during the course of the check. However, since this procedure is currently followed under § 121.441 without a derogation of safety, the FAA believes it should be permitted under Part 135. This proposal would, therefore, add a new paragraph to permit a person giving a check under Part 135 to give additional training to a pilot who fails any of the required maneuvers on the check.

This new paragraph would also prohibit use in Part 135 operations of a pilot who is unable to demonstrate satisfactory performance until such time as he passes the check.

§ 135.235 Check pilot authorization: application and issue

This section, currently § 135.135, would be redesignated as § 135.235. In addition, the reference to "§ 135.138" would be deleted and the words "this part" inserted in place thereof. This would avoid the necessity of an editorial amendment in the event of a future change of the section number containing the list of checks.

Ref. Proposal No. 56, OPS Review.

SUBPART H—TRAINING

§ 135.237 Applicability and terms used

This new section would define the applicability of new subpart H and would list the aircraft groups used as a basis for determining training requirements with regard to content and contain defi-

nitions of terms which apply throughout this subpart. Subpart H contains requirements applicable to each certificate holder for establishing and maintaining an approved training program for crewmembers, check airmen and instructors, and other operations personnel, and for the approval and use of aircraft simulators and other training devices in the conduct of that program. Since a major emphasis in the upgrading of Part 135 is on training, the training requirements currently in effect are no longer considered adequate for operations envisioned under the proposed Part 135. The new training requirements would closely parallel those in Subpart N of Part 121. These new training requirements are considered essential to ensure the continued qualification of crewmembers involved in operations under Part 135.

Ref. Proposal No. 50, Part 135 Review.

§ 135.239 Training program: general

This new section would prescribe the scope of the training program which would be required for a particular certicate holder conducting operations under this Part. It would specify the conditions and limitations which would would apply and further the objective of the FAA to provide for the present and future development of effective and practical training programs. It would also encourage the use of simulation equipment under Part 135 by providing authority for the use of aircraft simulators and other training devices in the certificate holder's training program when specifically approved by the Administrator. The training requirements specified are believed necessary to ensure that each crewmember receives adequate trainin gto enable him to perform his assigned duties with the highest degree of proficiency.

Ref. Proposal No. 51. Part 135 Review.

§ 135.241 Training program and Revision: initial and final approval

This new section would prescribe the procedures which must be followed in order to obtain the initial and final approval of a training program or the approval of a revision to an approved training program. The new provisions would provide for a more orderly review process, based on an initial approval, after which there would be an evaluation period, followed by the final approval. In addition, the substance of current § 135.55(e) is included, as amended, relating to the Administrator's authority to require a revision to a certificate holder's approved training program.

Ref Proposal No. 53, Part 135 Review.

§ 135.243 Training program: curriculum

This new section would prescribe the scope of the certificate holder's training program curriculum. This requirement is similar to that specified in § 121.403. Application of this requirement will greatly aid in standardization of the certificate holder's training program. In addition, it will provide both the FAA and the certificate holders a common basis for program evaluation.

Ref.Proposal No. 52, Part 135 Review.

§ 135.245 Crewmember training Requirements

This new section would prescribe the scope of crewmember initial, transition, upgrade and recurrent training requirements, in both the ground and flight phases. This section summarizes those training elements that the certificate holder must include in its approved training program. Appropriate references to sections in Part 135 are included which provide specific information regarding each of the above mentioned training requirements.

Ref. Proposal No. 58, Part 135 Review.

§ 135.247 Crewmember emergency training

This new section would prescribe the scope of emergency training that the certificate holder must provide its crewmembers. It is designed to provide an in depth emergency training phase for all crewmembers with respect to each aircraft type and configuration, and each kind of operation conducted. The various drills using appropriate equipment and procedures are designed to familiarize the crewmembers, first hand, with each anticipated emergency situation and operation prior to its actual need to be performed.

Ref. Proposal No. 59, Part 135 Review.

§ 135.249 Training requirements: handling and carriage of hazardous materials

This section, currently § 135.140, would be redesignated as § 135.249. In addition, it would be amended by deleting the words "dangerous articles and magnetized materials" wherever they appear and inserting the words "hazardous materials" in place thereof, and by adding a new paragraph (c) to require each certificate holder that elects not to accept hazardous mataerials to ensure that each crewmember is adequately trained to recognize those items classified as hazardous materials.

There have been instances in which operators have inadvertently accepted hazardous materials on board an aircraft because the certificate holder's employees did not recognize the material as hazardous. The mishandling of hazardous materials has been identified as a causal factor in some aircraft incidents. This amendment is designed to ensure that all Part 135 certificate holders provide their employees sufficient guidance on the recognition and proper handling of hazardous material so that such materials can be accepted, handled, and shipped safely, or refused.

A new paragraph (d) would permit Part 135 certificate holders to use available labor for loading, unloading, and handling hazardous materials in remote areas where employees of the certificate holder or contract personnel are not available, provided the persons used would be supervised by a crewmember who is qualified under this section.

A new paragraph (e) would provide flexibility with respect to date of completion of training requirements for the handling or carriage of hazardous materials.

Ref. Proposal No. 40, Part 135 Review; Proposal No. 804, OPS Review.

§ 135.251 Approval of airplane simulators and other training devices

This new section would provide for the approval of the use of aircraft simulators and other training devices in a Part 135 certificate holder's approved training program. The FAA believes that this amendment is needed to allow greater use of aircraft simulators and other training devices in consideration of the present state-of-the-art concerning aircraft simulators and related training devices.

Ref. Proposal No. 54, Part 135 Review.

§ 135.253 Training program: check airmen and instructor qualifications

This new section would prescribe specific qualification and training requirements for check airmen and instructors used in connection with a Part 135 certificate holder's flight operation. These requirements will ensure that the persons used as check airmen and instructors are sufficiently trained to adequately check or instruct on those aspects of training required in Part 135 operations This section also would prescribe minimum qualifications for simulator instructors.

Ref. Proposal No. 56, Part 135 Review.

§ 135.255 Check airmen and flight instructors: initial and transition training

This new section would prescribe the scope of the initial and transition ground training for pilot check airmen, the initial and transition ground training for pilot flight instructors, and the initial and transition flight training for pilot check airmen and pilot flight instructors engaged in a Part 135 certificate holder's operation. The functions of check airmen and instructors are such that their impact on the safety of operations is considerable; therefore, it is imperative that their training is of sufficient scope and depth to ensure their initial and continuing ability to adequately train and check other airmen.

Ref. Proposal No. 57, Part 135 Review.

§ 135.257 Pilot and flight attendant crewmember training programs

This section, currently § 135.55, would be redesignated as § 135.257. In addition, paragraph (a) would be amended to require each certificate holder, other than one who uses only himself as a pilot, to establish and maintain an "approved" training program for both pilots and flight attendants whom he uses. The program must be appropriate to the operations to which each pilot and flight

attendant is assigned. Current § 135.55 does not require an approved training program. The sophisticated aircraft and the increased passenger carrying capacity and the environment in which operations are conducted require a training program designed to adequately prepare crewmembers to function with a high degree of safety. The certificate holder would be required to ensure that each pilot and flight attendant is adequately trained to meet the knowledge and practical testing requirements of Part 135. A provision would be included to permit the Administrator to authorize a deviation from the requirements of this section, if deemed appropriate. This provision allowing a deviation is for the benefit of the smaller operation when safety would not be derogated by failure to comply with all or a part of the requirements of this section.

Paragraph (b) would be amended to reflect the scope of ground and flight training curricula the certificate holder must have in order to comply with § 135.257(a).

Paragraphs (c) and (d) of present §135.55 would remain unchanged. The substance of paragraph (e) would be relocated in proposed new § 135.241.

Ref. Proposal No. 17, Part 135 Review; Proposal Nos. 738 and 739, Ops Rev.

§ 135.259 Crewmember: initial and recurrent training requirements

This action, currently § 135.137, would be redesignated as § 135.259. In addition, it would be amended by inserting the word "crewmember" before the word "initial" in the title; by deleting the words "a pilot or flight attendant" as used in the section; and by deleting the last sentence containing the words: "This section does not apply to a certificate holder who uses only himself as a pilot".

The above changes are needed to make this section more compatible with other proposed revisions to this Part.

Ref. Proposal No. 38, Part 135 Review.

§ 135.261 Pilots: initial, transition, and upgrade ground training

This new section would prescribe the initial, transition, and upgrade ground training requirements for pilots which must be included in the particular certificate holder's approved training program.

§ 135.261 requires each certificate holder to have a training program. Such training requirements are further elaborated on in § 135.257. Accordingly, this section specifically outlines ground training requirements in the initial, transition, and upgrade phases of training. Such specifics are considered essential in view of the fact that previous training programs have had a tendency to summarize the various ground training aspects of the above referenced phases.

Ref. Proposal No. 60, Part 135 Review.

§ 135.263 Pilots: initial, transition, upgrade and differences flight training

This new section would prescribe the initial, transition, upgrade, and differences training requirements for pilots which must be included in a certificate holder's approved training program. This section would incorporate the concept of "training to a level of proficiency" and provide for the greater use of simulators or training devices which have the approval of the Administrator. Current Part 135 does not specify the use of simulators or training devices. The state-of-the-art has progressed to the point where this equipment may be used advantageously in training to reduce inflight training. It will result in a more economical and efficient operation without a deterioration in safety.

Ref. Proposal No. 62, Part 135 Review.

§ 134.265 Flight/Attendants: initial and tranition ground training

This new section would prescribe the initial and transition ground training requirements for flight attendants which must be included in a certificate holder's approved training program. Few, if any, operators presently utilize aircraft having a passenger seating capacity of more than 19, which under the regulations require a flight attendant. The section provides for training of flight attendants required with the anticipated advent of larger passenger carrying capacity aircraft.

Ref. Proposal No. 61, Part 135 Review.

§ 135.267 Recurrent training

This new section would prescribe the recurrent training requirements for crewmembers which must be included in the particular certificate holder's approved training program. Paragraph (c) of this section would provide authority for excepting a pilot from the requirements of this section if he has satisfactorily completed the check required by § 135.225 of Subpart G within the preceding 12 calendar months. Such recurrent training requirements are considered to be an integral part of a certificate holder's overall program because they perpetuate initial training and aid in standardization procedures.

Ref. Proposal No. 63, Part 135 Review.

SUBPART I—AIRPLANE PERFORMANCE

§ 135.271 Applicability

This proposed new section prescribes the applicability of this subpart. Certain terms used in this proposed subpart are defined.

Ref. Proposal No. 79, Part 135 Review.

§§ 135.273 through 135.305 Airplane performance

This explanation applies to this proposed new subpart as a whole. These proposed rules governing airplane performance operating limitations have been extracted from Subpart I of Part 121 with such changes as considered appropriate and would apply to the operation of the certain large airplanes which would be authorized to operate under Part 135.

Airplanes certificated under rules for transport category airplanes must be operated in accordance with the performance rules outlined in this subpart. Certification standards are incorporated into operating rules as airplane performance operating limitations to ensure that these airplanes are operated in accordance with the certification criteria.

The certain large nontransport category airplanes referred to herein were, upon certification, required to meet less stringent performance criteria. The proposed rules are needed to ensure that these airplanes are operated within limits which ensure the level of safety intended for transport category flight operations.

There are, however, certain airplanes that may be operated either as a small airplane or as a large airplane (such as the Learjet Model 24) by virtue of provisions of their airworthiness certification. These airplanes, if operated as a large airplane e.g., 12,500 pounds or more, would be required to comply with the requirements of Subpart I or, if operated as a small airplane e.g., 12,499 pounds or less, would be required to comply with provisions of § 135.155 which incorporates by reference certain of the requirements of Subpart I but did not the complete subpart. Likewise, certain airplanes (such as the DeHavilland Heron) which, although certificated in the transport category, were certificated as small airplanes would thereby be excluded from compliance with the requirements of Subpart I. However, these airplanes must comply with the requirements of § 135.155 and certain of the requirements of Subpart I as referenced in that section.

Ref. Proposal Nos. 80 through 96, Part 135 Review.

SUBPART "K"—MAINTENANCE, PREVENTIVE MAINTENANCE, AND ALTERATIONS

§ 135.333 Applicability

This proposal contains additional airworthiness requirements for two categories of air taxi aircraft. The aircraft categories are related to the passenger-carrying capacity of aircraft rather than takeoff gross weight or aircraft types. The increasing complexities of aircraft and air taxi operations make it necessary to ensure that air taxi maintenance requirements are properly identified and managed, and that the responsibilities and privileges are clearly defined. The requirements that are outlined are consistent with present day maintenance standards and techniques to manage aircraft airworthiness. Aircraft that are certificated for nine passengers or less will be required to meet the same inspection requirements of the present Part 135, plus additional maintenance requirements for the engine, propeller, rotor, and emergency equipment. These additional requirements are necessary to establish required maintenance for these components. Aircraft that are certificated for

ten passengers or more will be required to establish a maintenance program that is presently being used by air taxi operators of large aircraft and by air carriers. This system for the management of maintenance programs has proved effective in ensuring safety in air taxi operations using large aircraft and air carrier operations. Since it is recognized that time is a factor in the development of maintenance programs, the FAA invites comments addressed specifically to the appropriate compliance period necessary to ensure that no undue burden will be placed on the certificate holders operating under this part.

Ref. Proposal No. 97, Part 135 Review.

§ 135.335 Responsibility for airworthiness

This proposal places the responsibility for the airworthiness of ATCO aircraft on the certificate holder. The FAA believes that the certificate holder should be responsible for providing airworthy equipment. The proposal further outlines that a certificate holder operating aircraft certificated for a passenger seating configuration of 10 or more, which performs its own maintenance or has it performed by someone else, is responsible for having that maintenance performed in accordance with its manual, and the Federal Aviation Regulations. The manual referred to in this proposal references the manual which would be required by proposed § 135.349. Certificate holders operating aircraft certificated for a passenger seating capacity of nine or less are permitted under the present rules to use persons authorized in Part 43 to perform maintenance, preventive maintenance, and alterations. Those persons who perform maintenance, preventive maintenance, and alterations are responsible for performing maintenance in accordance with the regulations of this chapter. The certificate holder is responsible for having the aircraft inspected and maintained between inspections as required by this Part and Part 91.

Ref. Proposal No. 98, Part 135 Review, Proposal No. 805 Operations Review.

§ 135.337 Mechanical reliability reports

This section, currently § 135.57, would be redesignated as § 135.337. Paragraphs (a) and (c) would be amended by deleting the word "multiengine" and inserting the word "an" in place thereof. The purpose of this proposal is to broaden the scope of available data by which aircraft airworthiness standards are established with the object of increasing the level of safety in air taxi operations. This would include all air taxi aircraft. In addition, paragraph (e) would be amended to provide that the reports required by this section be transmitted in a form and a manner prescribed by the Administrator. The deletion of a specified form allows flexibility to the certificate holder and the FAA on the form and manner in which the reports are submitted.

Paragraph (f) would be amended by deleting the number "430" and inserting the number "830" in place thereof, to reflect current reporting requirements of the National Transportation Safety Board.

Ref. Proposal No. 18, Part 135 Review; Proposal No. 741, Ops. Review.

§ 135.339 Mechanical interruption summary report

This section, currently § 135.59 would be redesignated as § 135.339. The word "multiengine" would be deleted from the lead-in paragraph to broaden the scope of coverage to all aircraft. This proposal would provide for the reporting of mechanical interruptions which are not presently reported under present § 135.59. The FAA believes that the additional reporting requirements are necessary to broaden the scope of available data by which aircraft airworthiness standards are established, with the object of increasing the level of safety in air taxi operations.

Ref. Proposal No. 19, Part 135 Review.

§ 135.341 Approved aircraft inspection program

This section, currently § 135.60, would be redesignated § 135.341. By transferring this section into Subpart K, all maintenance rules would be covered in one subpart. This proposal also adds a requirement for the certificate holder to include instructions and procedures for the correction and deferral of discrepancies found as a result of inspection. The FAA believes that this procedure is necessary to ensure that the certificate holder and maintenance personnel are aware of the proper action that is necessary to record and correct discrepancies found during an inspection before an aircraft may be returned to service in air taxi operations.

Ref. Proposal No. 97, Part 135 Review; Proposal No. 744, Ops Review.

§ 135.343 Additional maintenance requirements, aircraft certificated to carry nine or less passengers

This section provides additional maintenance requirements for aircraft certificated to carry nine or less passengers. The FAA believes that the requirement for a maintenance program for the engine, propeller, rotor and each item of emergency equipment is necessary for the airworthiness of these components on aircraft in air taxi operation.

There is at present no requirement for these items to be covered under a controlled maintenance program. This proposal would allow the certificate holder to use an established program developed by the manufacturer, or submit a program based on the certificate holder's experience to the FAA for approval.

§ 135.345 Maintenance preventive maintenance and alterations organization

The purpose of this proposal is to require the certificate holder to have an adequate maintenance organization for the accomplishment of maintenance, preventive maintenance, and alterations on his aircraft. The proposal also provides for the certificate holder to arrange with another person (as defined in Part 1) to accomplish the work, provided that the certificate holder determines that the person has an organization adequate to perform the work. The FAA also believes it is necessary to separate required inspection functions from other functions as proposed in paragraph (c) to ensure that those items directly affecting the safety of flight are satisfactorily inspected before flight.

Ref. Proposal No. 99, Part 135 Review.

§ 135.347 Maintenance, preventive maintenance and alteration programs

This section would establish the requirement for a certificate holder to have an inspection program and a program covering other maintenance, preventive maintenance, and alterations. This proposal also provides for accomplishment of maintenance, preventive maintenance and alterations by other persons in accordance with the certificate holder's manual. The FAA believes that a certificate holder who is required to have a maintenance program under this part should be responsible for having an adequate program and for ensuring that the program is properly accomplished regardless of the person or facility where maintenance is performed.

Ref Proposal No. 100, Part 135 Review.

§ 135.349 Manual requirements

This section would require the certificate holder to include in his manual a description of the organization required by proposed § 135.345 and a list of persons with whom he has arranged for the performance of any required inspections, other maintenance, preventive maintenance, or alterations. This manual must contain the programs required by proposed § 135.347, including the methods of performing required inspections, other maintenance, preventive maintenance, and alterations. This proposal would make it necessary for a certificate holder to provide a maintenance program in manual form to be used in his organization in performance of maintenance, preventive maintenance, and alteration programs. This manual is necessary to ensure that the certificate holder has provided an adequate maintenance program for the airworthiness of his aircraft and to inform his personnel, or other persons who perform maintenance, of their responsibilities regarding the performance of maintenance on his aircraft. In this proposal, the term "buy back procedures" refers to the system used for the disposition of required inspection items to ensure they are inspected after work has been performed on them.

Ref. Proposal No. 101, Part 135 Review.

§ 135.351 Required inspection personnel

This section proposes certain requirements for inspection personnel. It provides for specific qualifications and su-

pervision of an inspection unit. This section also would require the listing of persons who have been trained, qualified, and authorized to conduct required inspections. The persons would be identified by name, occupational title, and the inspections that they are authorized to perform.

This proposal is necessary in order to provide competent and properly trained inspection personnel to perform the required inspections of this Part.

Ref. Proposal No. 102, Part 135 Review.

§ 135.353 Continuing analysis and surveillance

This section provides for the establishment by the certificate holder of a system to continually analyze the performance and effectiveness of the programs covering maintenance, preventive maintenance, and alterations. This section also provides for the correction of any deficiencies in those programs. Also included in this section is a provision whereby the Administrator may require the certificate holder to make changes in either or both of its programs described in paragraph (a) if those programs do not contain adequate procedures and standards to meet the requirements of this Part. This proposal is necessary to provide the certificate holder feedback on the performance and effectiveness of the certificate holder's programs covering maintenance, preventive maintenance, and alterations, so that deficiencies are corrected. The proposal for a procedure providing for changes required by the Administrator is similar to procedures included in other parts of the Federal Aviation Regulations and would ensure that deficient programs would be corrected promptly.

§135.355 Maintenance and preventive maintenance training programs

This proposal would require training programs which ensure that persons performing maintenance or preventive maintenance functions (including inspection personnel) would be fully informed about procedures, techniques, and new equipment in use and that those personnel are competent to perform their required duties.

§ 135.357 Certificate requirements

This section would establish the requirement that each person, other than a repair station certificated under the provisions of Subpart C of Part 145, who is directly in charge of maintenance, preventive maintenance, or alterations, and each person performing required inspections, hold an appropriate airman certificate. The FAA believes this is necessary to ensure the certificate holder is using maintenance personnel who have adequate knowledge of the regulations and hold an appropriate airman certificate.

Ref. Proposal No. 106, Part 135 Review.

§ 135.359 Authority to perform and approve maintenance, preventive maintenance and alterations

This section allows the Part 135 certificate holder to have maintenance performed by other persons. It also permits a certificate holder to perform maintenance for other certificate holders. This proposal allows the Part 135 certificate holder some flexibility for maintenance being performed by other persons when the certificate holder does not have the personnel or facilities to perform maintenance. It also requires that all major repairs and alterations must have been accomplished with data approved by the Administrator. The FAA believes the requirement for FAA approved data is necessary to ensure the airworthiness of aircraft operated by Part 135 certificate holders.

Ref. Proposal No. 107, Part 135 Review.

§ 135.361 Maintenance recording requirements

The proposed rule provides for the preparation, maintenance, and retention of certain records using the system specified in the certificate holder's manual. This proposal also specifies the length of time that the records must be retained and requires that the records be transferred with the aircraft at the time it is sold. It also would require the certificate holder to keep records of the total time on the engine and propeller, as well as the airframe. The FAA believes that the additional recordkeeping requirements, beyond those specified in § 91.173, are necessary in order to establish the continuous airworthiness history of the aircraft and its components.

Ref. Proposal No. 108, Part 135 Review.

§ 135.363 Transfer of maintenance records

The proposed rule would require the certificate holder to transfer certain maintenance records to the purchaser, at the time of the sale in either plain language form or in coded form. The coded form must provide for the preservation and retrieval of information in a manner acceptable to the Administrator. The purchaser may permit the seller to keep physical custody of the records; however, custody by the seller does not relieve the purchaser of the responsibility under § 135.361(e) to make the records available for inspection by a representative of the Administrator or authorized representatives of the National Transportation Safety Board.

This proposal is intended to ensure that a new owner receives all the records that are to be maintained by an operator as required in § 135.361.

Ref. Proposal No. 109, Part 135 Review.

§ 135.365 Airworthiness release or aircraft log entry

This proposed rule would require the certificate holder to prepare or cause to be prepared either an airworthiness release or an appropriate entry in the aircraft log after maintenance, preventive maintenance, or alterations. The airworthiness release or log entry must be prepared in accordance with the procedures set forth in the certificate holder's manual.

The FAA believes that this proposal is necessary to provide a system for employees of the certificate holder to determine the airworthiness status of an aircraft after maintenance has been performed. The person providing an airworthiness release or aircraft log entry would be required to determine that all the requirements for inspection and airworthiness are satisfied. This proposal also would aid the flight crew in determining the airworthiness of the aircraft prior to flight.

Ref. Proposal No. 110, Part 135 Review.

DRAFTING INFORMATION

The principal authors of this document are David W. Kress, Flight Standards Service and Richard C. Beitel, Office of the Chief Counsel.

PROPOSED AMENDMENTS

Accordingly, it is proposed to amend Parts 121 and 135 of the Federal Aviation Regulations as follows:

PART 121—CERTIFICATION AND OPERATIONS: DOMESTIC, FLAG, AND SUPPLEMENTAL AIR CARRIERS AND COMMERCIAL OPERATORS OF LARGE AIRCRAFT

1. By amending § 121.9 by amending the title and revising paragraph (a), to read as follows:

§ 121.9 Operations of small aircraft and certain large aircraft.

(a) No person may conduct operations with aircraft having a maximum passenger capacity of 30 seats or less and a maximum payload capacity of 7,500 pounds or less, unless he conducts those operations in accordance with the rules of Part 135 of this chapter except §§ 135.7, 135.19, 135.27, 135.29, 135.31, and 135.35 of Subpart A, and appropriate operations specifications, in lieu of Subparts E through V, of this Part 121. However, the holder of an air carrie operating certificate issued under this Part may maintain its aircraft operated under Part 135 of this chapter in accordance with a continuous airworthiness maintenance program that meets the requirements in Subpart L of this Part and operations specifications issued to it under this Part. Operations specifications issued under this section contain such operating limitations and requirements as the Administrator finds necessary.

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2. Special Federal Aviation Regulation 23, which is published in full text under Part 135, would be republished without change.

3. By revising Part 135 to read as set forth below.

4. By amending § 1 of Appendix A to Part 135 by deleting the reference "§ 135.144(d)" and substituting for it the reference "§ 135.141(b)(4)".

PART 135—AIR TAXI OPERATORS AND COMMERCIAL OPERATORS

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Subpart A—General

§ 135.1 Applicability.

(a) Except as provided in paragraph (b) of this section, this part prescribes rules governing—

(1) Air taxi operations conducted under the exemption authority of Part 298 of this title;

(2) The transportation of mail by aircraft conducted under a postal service contract awarded pursuant to Chapter 54 Section 5402c Title 39, United States Code;

(3) The carrying in air commerce by any person, other than an air carrier, of persons or property for compensation or hire (commercial operations) in aircraft having a maximum passenger capacity of 30 seats or less and a maximum payload capacity of 7,500 pounds or less; and

(4) Each person who is on board an aircraft being operated under this part.

(b) This part does not apply to—

(1) Student instruction;

(2) Nonstop sightseeing flights that begin and end at the same airport, and are conducted within a 25 statute mile radius of that airport;

(3) Ferry or training flights;

(4) Aerial work operations, including—

(i) Crop dusting, seeding, spraying, and bird chasing;

(ii) Banner towing;

(iii) Aerial photography or survey;

(iv) Fire fighting;

(v) Helicopter operations in construction or repair work (but not including transportation to and from the site of operations); and

(vi) Powerline or pipeline patrol;

(5) Sightseeing flights conducted in hot air balloons;

(6) Nonstop flight conducted within a 25 statute mile radius of the airport of takeoff carrying persons for the purpose of intentional parachute jumps;

(7) Helicopter flights conducted with a 25 statute mile radius of the airport of takeoff, if—

(i) Not more than two passengers are carried in the helicopter in addition to the required flightcrew;

(ii) Each flight is made only under VFR during the day;

(iii) The helicopter used is certificated in the standard category and complies with the 100-hour inspection requirements of Part 91 of this chapter;

(iv) The operator notifies the FAA District Office having jurisdiction over the area concerned, at least 72 hours before each flight and furnishes any essential information that the office requests;

(v) The number of flights does not exceed a total of six in any calendar year;

(vi) Each specific flight has been approved by the Administrator; and

(vii) Cargo is not carried in or on the helicopter.

(8) Operations conducted under the authority of Part 133 or 375 of this title; or

(9) Emergency mail service conducted under Section 405(b) of the Federal Aviation Act of 1958.

§ 135.2 Air taxi operations with large aircraft.

(a) Except as provided in paragraph (d) of this section, no person may conduct air taxi operations in large aircraft under an individual exemption and authorization issued by the Civil Aeronautics Board or under the exemption authority of Part 298 of this title, unless that person—

(1) Has complied with the certification requirements for supplemental air carriers as set forth in Part 121 of this chapter, except that he need not obtain, nor is he eligible for, a certificate under Part 121 of this chapter; and

(2) Conducts those operations in accordance with the rules of Part 121 of this chapter that are applicable to supplemental air carriers.

However, the Administrator may issue operations specifications which require an operator to comply with the rule applicable to domestic or flag air carriers, as appropriate, in lieu of the supplemental air carrier rules required by paragraph (a)(2) if he determines compliance with those rules necessary to provide an appropriate level of safety for the operation.

(b) The holder of an air taxi/commercial operator (ATCO) operating certificate who is required to comply with Subpart L of Part 121 of this chapter, "Maintenance, Preventive Maintenance, and Alterations" under paragraph (a) of this section, may perform and approve maintenance, preventive maintenance and alterations on aircraft having a maximum passenger capacity of 30 seats or less and a maximum payload of 7,500 pounds or less as provided in Subpart L of Part 121 of this chapter. These aircraft so maintained shall be identified by registration number in the operations specifications of the air taxi operator using the aircraft.

(c) Operations that are subject to paragraph (a) of this section are not subject to §§ 135.23 through 135.45 of Subpart A and Subparts B through K of this part. Seaplanes used in operations subject to paragraph (a) of this section are not subject to § 121.291(a) of this chapter.

(d) Air taxi operations conducted within aircraft having a maximum passenger capacity of 30 seats or less, and a maximum payload capacity of 7,500 pounds or less shall be conducted in accordance with the rules of this Part.

However, an operator who is currently conducting ATCO operations in aircraft described in paragraph (d) of this section may operate under the provisions of paragraph (a)(1) and (2) of this section if he applies for and is issued

amended operations specifications for such operations under § 135.19.

(e) For the purposes of this part—

(1) "Maximum payload capacity" means—

(i) In the case of an aircraft for which a maximum zero fuel weight is prescribed in FAA technical specifications, the maximum zero fuel weight, less empty weight, less all justifiable aircraft equipment, and less the operating load (consisting of minimum flight crew, foods and beverages and supplies and equipment related to foods and beverages, but not including disposable fuel or oil);

(ii) For all other aircraft, the maximum certificated takeoff weight of an aircraft, less the empty weight, less all justifiable aircraft equipment, and less the operating load (consisting of minimum fuel load, oil, and flight crew). The allowance for the weight of the crew, oil, and fuel is as follows:

(A) Crew—200 pounds per crewmember required under the Federal Aviation Regulations.

(B) Oil—350 pounds.

(C) Fuel—the minimum weight of fuel required by the Federal Aviation Regulations for a flight between domestic points 174 nautical miles apart under VFR weather conditions and not involving extended overwater operations.

(2) "Empty weight" means the weight of the airframe, engines, propellers, rotors, and fixed equipment. Empty weight excludes the weight of the crew and payload, but includes the weight of all fixed ballast, unusable fuel supply, undrainable oil, total quantity of engine coolant, and total quantity of hydraulic fluid; and

(3) "Maximum zero fuel weight" means the maximum permissible weight of an aircraft with no disposable fuel or oil. The zero fuel weight figure may be found in either the aircraft type certificate data sheet or the approved aircraft flight manual, or both.

(4) For the purposes of pargaraphs (e)(1) (i) and (ii), justifiable aircraft equipment means any equipment necessary for the operation of the aircraft. It does not include equipment or ballast specifically installed, permanently or otherwise, for the purpose of altering the empty weight of an aircraft to meet the maximum payload capacity specified in paragraph (d) of this section.

§ 135.3 Rules applicable to operations subject to this part.

Each person operating an aircraft in operations to which this Part applies shall—

(a) While operating inside the United States, comply with the applicable rules of this chapter; and

(b) While operating outside the United States, comply with Annex 2, Rules of the Air, to the Convention on International Civil Aviation or the regulations of any foreign country, whichever applies, and any rules of Parts 61 and 91 of this chapter and this Part that are more restrictive than the Annex or those regulations and can be complied with without violating that Annex or those regulations.

(c) Annex 2 to the Convention on International Civil Aviation, Sixth Edition—September 1970, with amendments through 20 effective August 1976, to which reference is made in this part is incorporated into this part and made a part hereof as provided in 5 U.S.C. 552 and pursuant to 1 CFR Part 51. Annex 2 (including a complete historic file of changes thereto) is available for public inspection at the Rules Docket, AGC-24, Federal Aviation Administration, 800 Independence Avenue SW., Washington, D.C. 20591. In addition, Annex 2 may be purchased from the International Civil Aviation Organization (Attention: Distribution Officer), P.O. Box 400, Succursale; Place de L'Aviation Internationale, 1000 Sherbrooke Street West, Montreal, Quebec, Canada H3A 2R2.

§ 135.5 [Reserved]

§ 135.7 Certificate and operations specifications required.

No person may operate an aircraft in operations to which this part applies without, or in violation of, an ATCO operating certificate and appropriate operations specifications issued under this part, or, in the case of operations with large aircraft having a maximum passenger capacity of more than 30 seats, or a maximum payload capacity of more than 7,500 pounds, without, or in violation of, operations specifications issued under Part 121 of this chapter.

§ 135.9 Applicability of rules to unauthorized operators.

The rules in this part which refer to a person certificated under § 135.7 apply also to any person who engages in any operation governed by this Part without the appropriate certificate and operations specifications required by § 135.7.

§ 135.11 Duration of certificate.

An ATCO certificate is effective until surrendered, suspended or revoked. The holder of an ATCO certificate shall return it to the Administrator within 10 days after receipt of notice of suspension or revocation.

§ 135.13 Application and issue of certificate and operations specifications.

(a) An application for an ATCO certificate and appropriate operations specifications is made on a form and in a manner prescribed by the Administrator and filed with the FAA District Office that has jurisdiction over the area in which the applicant's principal business office is located.

(b) An applicant who meets the requirements of this Part is entitled to—

(e) An ATCO certificate containing all business names under which he may conduct operations and the address of each business office used by the holder; and

(2) Separate operations specifications containing the type of operations authorized, the area of operation authorized, the type, category, and class of aircraft that he may us in those operations, registration numbers of aircraft that are inspected in accordance with an approved aircraft inspection program, registration numbers of the aircraft that are subject to a continuous airworthiness maintenance program, and maintenance items that are required by the Administrator under this Part, including time limitations or standards for determining overhaul or reference thereto, inspections and checks for airframes, aircraft engines, propellers, rotors, appliances, and emergency equipment, any authorized deviation from this part, and such other items as the Administrator may require or allow to meet any particular situation.

§ 135.15 Eligibility for certificate and operations specifications.

(a) To be eligible for an ATCO certificate and appropriate operations specifications, a person must—

(1) Be a citizen of the United States, a partnership of which each member is a citizen of the United States, or a corporation or association created or organized under the laws of the United States or any state, territory or possession of the United States, of which the president and two-thirds or more of the board of directors and other managing officers thereof are citizens of the United States and in which at least 75 percent of the voting interest is owned or controlled by citizens of the United States or one of its possessions; and

(2) Show, to the satisfaction of the Administrator, that he is able to conduct each kind of operation for which he seeks authorization in compliance with applicable regulations, and

(3) Hold such economic authority as may be required by the Civil Aeronautics Board.

However, no person holding a commercial operator operating certificate issued under Part 121 of this chapter is eligible for an ATCO certificate unless he shows to the satisfaction of the Administrator that his contract carriage business in large aircraft, having a maximum passenger capacity of more than 30 seats or a maximum payload capacity of more than 7,500 pounds, will not result directly or indirectly from his air taxi business.

(b) The Administrator may deny any applicant a certificate under this part if he finds—

(1) That an air carrier or commercial operator certificate under Part 121 or an ATCO certificate previously issued to the applicant was revoked; or

(2) That a person who was employed in a position similar to general manager, director of operations, director of maintenance, chief pilot, or chief inspector, or who has exercised control with respect to any ATCO certificate holder, air carrier, or commercial operator whose operating certificate has been revoked, will be employed in any of those positions or a similar position, or will be in control of or have a substantial ownership interest in the applicant, and that the person's employment or control contributed materially to the reasons for revoking that certificate.

§ 135.17 Amendment of certificate.

(a) The Administrator may amend an ATCO certificate—

(1) On his own initiative, under section 609 of the Federal Aviation Act of 1958 (49 U.S.C. 1429) and Part 13 of this chapter; or

(2) Upon application by the holder of that certificate.

(b) An application to amend an ATCO certificate is submitted on a form and in a manner prescribed by the Administrator. The applicant must file the application with the FAA District Office having jurisdiction over the area in which the applicant's principal business office is located at least 15 days before the date that he proposes for the amendment to become effective, unless a shorter filing period is approved by that office.

The Administrator grants a request to amend an ATCO certificate if he determines that safety in air commerce and the public interest so allow.

(d) Within 30 days after receiving a refusal to amend, the holder may petition the Administrator to reconsider the refusal.

§ 135.19 Amendment of operations specifications.

(a) The Administrator may amend any operations specifications issued under this part if:

(1) He determines that safety in air commerce requires that amendment; or

(2) Upon an application by the holder, the Administrator determines that safety in air commerce allows that amendment.

(b) An application to amend operations specifications is submitted on a form and in a manner prescribed by the Administrator. The applicant must file the application with the FAA District Office having jurisdiction over the area in which the applicant's principal business office is located at least 15 days before the date that he proposes for the amendment to become effective, unless a shorter filing period is approved by that office.

(c) Within 30 days after a notice of refusal to approve a holder's application for amendment, the holder may petition the Administrator to reconsider the refusal to amend.

(d) When the Administrator amends operations specifications, he gives notice in writing to the holder of a proposed amendment to the operations specifications, fixing a period of not less than 7 days within which the holder may submit written information, views, and arguments concerning the proposed amendment. After consideration of all relevant matter presented, the Administrator notifies the holder of any amendment adopted, or a rescission of the notice.

The amendment becomes effective not less than 30 days after the holder receives notice of the adoption of the amendment, unless the holder petitions the Administrator for reconsideration of the amendment. In such a case, the effective date of the amendment is stayed pending a decision by the Administrator. If the Administrator finds that there is an emergency requiring immediate action with respect to safety in air commerce that makes the provisions prescribed by this paragraph impracticable, or contrary to the public interest, he notifies the holder of an amendment to the operations specifications without giving the 7 days notice, and the amendment becomes effective when the holder receives it.

§ 135.21 Emergency operations.

(a) In an emergency involving the safety of persons or property, the holder of an ATCO operating certificate may deviate, to the extent required to meet that emergency, from the rules of this part relating to aircraft and equipment and weather minimums.

(b) In an emergency involving the safety of persons or property, the pilot in command may deviate from any rule of this part to the extent required to meet that emergency.

(c) Each person who, under the authority of this section, deviates from a rule of this part shall, within 10 days after the deviation, send to the FAA District Office having jurisdiction over the area in which the certificate holder's principal business office is located, a complete report of the aircraft operation involved, including a description of the deviation and reasons for it.

§ 135.23 Manual requirements.

(a) Each certificate holder, other than one who uses only himself as a pilot, shall prepare and keep current a manual setting forth the certificate holder's procedures and policies acceptable to the Administrator. This manual must be used by the certificate holder's flight, ground, and maintenance personnel in conducting its operations. However, the Administrator may authorize a deviation from this paragraph if he finds that because of the limited size of the operation, all or part of the manual is not necessary for guidnace of flight, ground, or maintenance personnel.

(b) Each manual shall be kept in a form that is acceptable to the Administrator and easy to revise and shall have the date of the last revision on each revised page. The manual must include:

(1) The identity of each person in a management capacity who is authorized to act for the certificate holder in his assigned area of responsibility and his duties, responsibilities and authority;

(2) Procedures for ensuring compliance with aircraft weight and balance limitations and, in the case of multiengine aircraft, for assertaining compliance with the requirements of § 135.157;

(3) Copies of the certificate holder's operations specifications or appropriate extracted information, including area of operations authorized, category and class of aircraft authorized, crew complements, and types of operations authorized (such as VFR, IFR, day, night, passenger cargo);

(4) Procedures for complying with accident notification requirements;

(5) Procedures for ensuring that the pilot in command knows that required airworthiness inspections have been made and that the aircraft has been approved for return to service in compliance with applicable maintenance requirements.

(6) Procedures for reporting and recording mechanical irregularities that come to the attention of the pilot in command before, during, and after completion of a flight.

(7) Procedures to be followed by the pilot in command for ascertaining that mechanical irregularities or defects reported for previous flights have been corrected or that correction has been defered;

(8) Procedures to be followed by the pilot in command to obtain maintenance, preventive maintenance, and servicing of the aircraft at a place where prior arrangements have not been made by the operator, when the pilot is authorized to so act for the operator;

(9) Procedures in accordance with § 135.149 for the release for, or continuation of, flight if any item of equipment required for the particular type of operation becomes inoperative or unserviceable en route.

(10) Procedures for refueling aircraft, eliminating fuel contamination, protection from fire (including electrostatic protection), and supervising and protecting passengers during refueling;

(11) Procedures to be followed by the pilot in command in the briefing required by § 135.105 of this part;

(12) Flight locating procedures, when applicable;

(13) Procedures for ensuring compliance with emergency procedures, including a list of the functions assigned each category of required crewmembers in connection with emergency and emergency evacuation duties under § 135.113 of this Part.

(14) En route qualification procedures for pilots, when applicable;

(15) The approved aircraft inspection program, when applicable;

(16) Procedures and instructions to enable personnel to recognize hazardous materials, as defined in Title 49 CFR, Subchapter C, and if these materials are to be carried, stored, or handled, procedures and instructions for including:

(i) Accepting shipment of hazardous material as required by Title 49 CFR, Subchapter C, to assure proper packaging, marking, labeling, shipping documents, compatibility of articles, and instructions on the loading, storage, and handling thereof.

(ii) Notification and reporting hazardous material incidents as required by Title 49 CFR § 175.45.

(iii) Notification of the pilot in command when there are hazardous materials aboard, as required by Title 49 CFR § 175.33.

(17) Procedures for the evacuation of persons who may need the assistance of another person to move expeditiously to an exit in the event of an emergency; and

(18) Other procedures and policy instructions pertinent to the certificate holder's operations, that are issued by the certificate holder.

(c) Each certificate holder shall maintain at least one copy of the manual at its principal operations base.

(d) The manual must not be contrary to any applicable Federal regulation, foreign regulation applicable to the certificate holder's operations in foreign countries, or the certificate holder's operations, specifications, or operating certificate.

(e) A copy of the manual, or appropriate portions of the manual (and changes and additions thereto) shall be made available to maintenance personnel by the certificate holder and furnished to:

(1) Its ground operations personnel;

(2) Its crewmembers; and

(3) Representatives of the Administrator assigned to the certificate holder.

(f) Each person to whom a manual or appropriate portions of it are furnished under paragraphs (1) and (2) of paragraph (e) of this section shall keep it up to date with the changes and additions furnished to him.

(g) Except as provided in paragraph (h) of this section, each certificate holder shall carry appropriate parts of the manual on each aircraft when away from the principal base. The appropriate parts must be available for use of ground or flight personnel.

(h) If a certificate holder conducts inspections at specified stations where it keeps the approved inspection program manual, it is not required to carry the manual aboard the aircraft en route to those stations.

§ 135.25 Aircraft requirements.

(a) No certificate holder may operate an aircraft in operations to which this part applies unless that aircraft—

(1) Is registered as a civil aircraft of the United States and carries an appropriate and current airworthiness certificate issued under this chapter; and

(2) Is in an airworthy condition and meets the applicable airworthiness requirements of this chapter, including those relating to identification and equipment.

(b) Each certificate holder must have the exclusive use of at least one aircraft that meets the requirements for at least one kind of operation authorized in his oerations specifications. In addition, for each kind of operation for which he does not have the exclusive use of an aircraft, he must have available for use under a written agreement (including arrangements for performing required maintenance) at least one aircraft that meets the requirements for that kind of operation. However, this paragraph does not prohibit the operator from using or authorizing the use of the aircraft for other than air taxi or commercial operations, nor require the certificate holder to have exclusive use of all aircraft that he uses.

(c) For the purposes of paragraph (b) of this section, a person has exclusive use of an aircraft if he has the sole possession, control, and use of it for flight, as owner, or has a written agreement (including arrangements for the performance or required maintenance), in effect when the aircraft is operated, giving him that possession, control, and use for at least 6 consecutive months.

§ 135.27 Business office and operations base.

(a) Each certificate holder shall maintain a principal business office.

(b) Each certificate holder shall, before establishing, or changing the location of any business office or operations base, except a temporary operations base, notify in writing the FAA District Office having jurisdiction over the area in which the certificate holder's principle business office is located.

(c) No certificate holder who establishes or changes the location of any business office or operations base, except a temporary operations base, may operate an aircraft in operations subject to this part unless he has complied with paragraph (b) of this section.

§ 135.29 Use of business names.

No certificate holder may operate an aircraft in operations subject to this part under a business name that is not on his ATCO certificate.

§ 135.31 Advertising.

No certificate holder may advertise or otherwise offer to perform operations subject to this part that are not authorized by his ATCO certificate and operations specifications.

§ 135.33 Area limitations on operations.

(a) No person may operate an aircraft in a geographical area that is not specifically authorized by appropriate operations specifications issued under this part.

(b) No person may operate an aircraft in a foreign country unless he is authorized to do so by that country.

§ 135.35 Termination of operations.

Within 30 days after a certificate holder ceases operations under this part, he shall surrender his operating certificate and operations specifications to the FAA District Office last having jurisdiction over these operations.

§ 135.37 Periodic financial status review.

(a) Each ATCO certificate holder shall permit the Administrator to review its financial status annually. Data made available to the Administrator for review must include:

(1) The latest fiscal reports that accurately reflect assets, liabilities, and net worth of the certificate holder;

(2) An itemization of liabilities more than 90 days past due on the applicable fiscal report, if any, showing each creditor's name and address, a description of the liability, and the amount and due date of the liability;

(3) A schedule of aviation insurance coverage in effect during the period covered by the fiscal report showing insurance companies, policy numbers, types, amounts, and periods of coverage, and special conditions, exclusions, and limitations;

(4) An itemization of claims in litigation or otherwise outstanding against the applicant, if any, on the date the financial information is submitted, and

(5) Profit and loss statement reflecting total operations for both the current and preceding reporting period.

§ 135.39 Management personnel required.

(a) Each certificate holder must have enough qualified management personnel in the following or equivalent positions to ensure safety in its operations:

(1) Director of operations.

(2) Chief pilot.

(3) Director of maintenance.

(b) Upon application by the certificate holder, the Administrator may approve different positions or numbers of positions than those listed in paragraph (a) of this section for a particular operation if the certificate holder shows that it can perform its operations safely under the direction of fewer or different categories of management personnel.

(c) Each certificate holder shall:

(1) Set forth the duties, responsibilities, and authority of the personnel required by this section in the manual required by § 135.23;

(2) List in the manual required by § 135.23 the name and address of the person or persons assigned to those positions; and

(3) Within 10 working days, notify the FAA District Office charged with the overall inspection of the certificate holder of any change made in the assignment of persons to the listed positions.

§ 135.41 Management personnel qualifications.

(a) No person may serve as director of operations unless he knows the contents of the manual required by § 135.23, the operations specifications, and the provisions of this Part and other pertinent regulations necessary to the proper performance of his duties and:

(1) Holds at least an airline transport pilot certificate, and has had at least three years of experience as pilot in command of aircraft operated under this Part, Part 121, or Part 127 of this chapter and;

(2) Has had at least three years of experience as director of operations with an ATCO certificate holder or air carrier or commercial operator operating under Part 121 or 127 of this chapter, or a position determined by the Administrator to be of comparable responsibility. However, the Administrator may grant a deviation from his requirement if he finds that the person has had equivalent aeronautical experience.

(b) No person may serve as chief pilot unless he:

(1) Knows the contents of the manual required by § 135.23, the operations specifications, and the provisions of this part necessary to the proper performance of his duties.

(2) Holds at least a current airline transport pilot certificate with appropriate ratings for at least one of the types of aircraft used; and

(3) Has had at least three years of experience as pilot in command of aircraft in operations under this Part, Part 121

or 127 of this chapter. However, the Administrator may grant a deviation from the requirement of this requirement if he finds that the person has had equivalent aeronautical experience.

(c) No person may serve as a Director of Maintenance unless he:

(1) Is familiar with the maintenance sections of the certificate holder's manual, operations specifications, and the Federal Aviation Regulations applicable to the specific operation.

(2) Has held a current mechanic certificate with both airframe and powerplant ratings for at least three years; and

(3) Has had at least three years of maintenance experience as a certificated mechanic on aircraft, including one year of current experience on the type of aircraft used in the certificate holder's operation, or at least three years of experience with a certificated airframe repair station, including one year in the capacity of approving aircraft for return to service; however, the Administrator may grant a deviation from the requirements of this subparagraph if he finds that the person has had equivalent aeronautical experience.

§ 135.43 Carriage of narcotic drugs, marihuana, and depresant or stimulant drugs or substances.

If the holder of a certificate issued under this part permits any aircraft owned or leased by that holder to be engaged in any operation that the certificate holder knows to be in violation of § 91.12(a) of this chapter, that operation is a basis for suspending or revoking the certificate.

§ 135.45 Crewmember certificate; international operations; application and issue.

(a) This section provides for the issuance of a crewmember certificate to United States citizens who are employed by ATCO certificate holders as flight crewmembers or crewmembers on United States registered aircraft engaged in international air commerce. The purpose of the certificate is to facilitate the entry and clearance of those crewmembers into ICAO contracting states. They are issued under Annex 9, as amended, to the Convention on International Civil Aviation.

(b) An application for a crewmember certificate is made on FAA Form 2116, "Application for Crewmember Certificate," to the FAA District Office having certificate responsibility for the ATCO certificate holder, by whom the applicant is employed. The certificate is issued on FAA Form 2116.1 "Crewmember Certificate."

(c) The holder of a certificate issued under this section, or the ATCO certificate holder by whom he is employed, shall surrender the certificate for cancellation at the nearest FAA District Office at the end of the holder's assignment in international air commerce with that carrier or operator.

Subpart B—Flight Operations

§ 135.47 General.

This subpart prescribes rules, in addition to those in Part 91 of this chapter, that apply to operations under this part.

§ 135.49 Recordkeeping requirements.

(a) Each certificate holder shall keep at his principal business office or at such other places as may be approved by the Administrator, and make available for inspection by the Administrator the following:

(1) His ATCO certificate;

(2) His operations specifications;

(3) A current list of the aircraft used or available for use by him in operations subject to this part and the operations for which each is equipped; and

(4) An individual record of each pilot used by him in operations subject to this part, including the following information:

(i) The full name of the pilot.

(ii) The pilot certificate (by type and number) and ratings that the pilot holds.

(iii) The pilot's aeronautical experience in sufficient detail to determine his qualifications to pilot aircraft in operations subject to this part.

(iv) The pilot's current duties and the date of his assignment to those duties.

(v) The effective date and class of the medical certificate that the pilot holds.

(vi) The date and result of each of the initial and recurrent proficiency tests and instrument and route checks required by this Part and the type of aircraft flown during that test or check.

(vii) The pilot's flight and duty time in sufficient detail to determine compliance with the flight and duty time limitations of this Part.

(viii) The pilot's check pilot authorization, if any.

(ix) Any action taken concerning the pilot's release from employment for physical or professional disqualification.

(x) The date of the completion of the initial phase and each recurrent phase of the training required by this part.

(b) Each certificate holder shall keep each record required by paragraph (a) (3) and (4) of this section for at least 12 months after it is made.

(c) For multiengine aircraft, each certificate holder is responsible for the preparation and accuracy of a load manifest in duplicate containing information concerning the loading of the aircraft. The manifest must be prepared before each takeoff and must include:

(1) The number of passengers;

(2) The total weight of the loaded aircraft;

(3) The maximum allowable takeoff weight for that flight;

(4) The center of gravity limits;

(5) The center of gravity of the loaded aircraft except, that the actual center of gravity need not be computed if the aircraft is loaded according to a loading schedule or other approved method that ensures that the center of gravity of the loaded aircraft is within approved limits. In such cases, an entry shall be made on the manifest indicating that the center of gravity is within limits in accordance with an identified loading schedule.

(6) Registration number of the aircraft or flight number;

(7) The origin and destination; and

(8) Identification of crew members and their crew position assignments.

(d) The pilot in command of an aircraft for which a load manifest is required to be prepared shall carry a copy of the completed load manifest in the aircraft to its destination and arrange at the takeoff airport for a copy to be mailed to the certificate holder or retained in a suitable place at the airport of takeoff until the flight is completed. The certificate holder shall keep copies of completed load manifests for at least 30 days at its principal operations base, or at another location used by it and approved by the Administrator.

§ 135.51 Flight Information: facilities and services.

(a) Before beginning a flight, each pilot in command shall obtain all available current reports or information on airport conditions and irregularities of navigation facilities that may affect the safety of the flight.

(b) During the flight, the pilot in command shall obtain any additional available information on meterological conditions and irregularities or facilities and services that may affect the safety of the flight.

§ 135.53 Reporting of mechanical irregularities.

(a) Each certificate holder shall provide a maintenance log for the use of flight and maintenance personnel in recording and correcting mechanical irregularities.

(b) Each person who takes action in the case of a reported or observed failure or malfunction of an airframe, powerplant, propeller, rotor, or appliance, shall record that action in the aircraft maintenance log.

(c) Before each takeoff, the pilot in command shall ascertain the status of each irregularity entered in the maintenance log at the end of the preceding landing and that corrective action has been taken, if required.

(d) After each landing, the pilot in command shall enter or have entered in the maintenance log of the aircraft each defect or mechanical irregularity that comes to his attention during flight time as that term is defined in Part 1 of this chapter.

(e) Each certificate holder shall have a procedure for keeping adequate copies of the record required in paragraphs (a), (b), (c) and (d) of this section in the aircraft for access by flight and maintenance personnel and shall include that procedure in the manual required by § 135.23.

§ 135.55 Reporting potentially hazardous meteorological conditions and irregularities of communications or navigation facilities.

Whenever a pilot encounters a potentially hazardous meteorological condition or an irregularity in a ground communications or navigational facility in flight, the knowledge of which he considers essential to the safety of other flights, he shall notify an appropriate ground radio station as soon as practicable and request that the information be disseminated.

§ 135.57 Restriction or suspension of operations: continuation of flight in an emergency.

(a) During operations under this part, if a certificate holder or pilot in command knows of conditions, including airport and runway conditions, that are a hazard to safe operations, the certificate holder or pilot in command, as the case may be, shall restrict or suspend operations as necessary until those conditions are corrected.

(b) No pilot in command may allow a flight to continue toward any airport of intended landing under the conditions set forth in paragraph (a) of this section, unless, in the opinion of the pilot in command, there is no safer procedure. In that event, the continuation toward that airport is an emergency situation as set forth in § 135.21.

§ 135.59 Airworthiness check.

The pilot in command may not begin a flight unless he determines that the airworthiness inspections required by § 91.169 of this chapter, or § 135.341, whichever is applicable, have been made.

§ 135.61 Inspections and tests.

Each certificate holder and each person employed by the certificate holder shall allow the Administrator, at any time or place, to make inspections or tests (including en route inspections) to determine the holder's compliance with the Federal Aviation Act of 1958, applicable regulations, his ATCO certificate, and his operations specifications.

§ 135.63 Inspectors credentials: admission to pilots' compartment: forward observer's seat.

(a) Whenever, in performing his duties of conducting an inspection, an inspector of the Federal Aviation Administration presents an Aviation Safety Inspector credential, FAA Form 110A, to the pilot in command of an aircraft operated by the ATCO certificate holder he must be given free and uninterrupted access to the pilot compartment of that aircraft.

(b) A forward observer's seat on the flight deck, or forward passenger seat with appropriate communications equipment nearby, must be provided for use by the Administrator while conducting en route inspections. The location of the seat and communications equipment, with respect to its suitability for use in conducting en route inspections, is determined by the Administrator.

§ 135.65 Responsibility for operational control.

Each certificate holder is responsible for operational control (the exercise of authority over initiating, conducting, or terminating a flight operation) and shall list, in the manual required by § 135.23, each person authorized by it to exercise operational control.

§ 135.67 Flight locating requirements.

(a) Each certificate holder must have procedures established for locating each flight, for which an FAA flight plan is not filed, that:

(1) Provide the certificate holder with at least the information required to be included in a VFR flight plan;

(2) Provide for timely notification of an FAA facility or search and rescue facility, if an aircraft is overdue or missing; and

(3) Provide the certificate holder with the location, date, and estimated time for reestablishing radio or telephone communications, if the flight will operate in an area where radio communications cannot be maintained.

(b) Flight locating information shall be retained at the certificate holder's principal place of business, or at such other places as may be designated by the certificate holder in the flight locating procedures, until the completion of the flight.

(c) Each certificate holder shall furnish the representative of the Administrator assigned to it with a copy of its flight locating procedures and any changes or additions thereto, unless those procedures are included in a manual required to be maintained under this part.

§ 135.69 Informing personnel of operational information and appropriate changes.

(a) Each certificate holder shall inform each person in his employment of the operations specifications that apply to his duties and responsibilities and shall make available to each of the pilots the following materials in current form:

(1) Airman's Information Manual (Airman's Guide in Alaskan and Pacific Regions) or a commercial publication that contains the same information.

(2) This part and Part 91 of this chapter.

(3) Aircraft Equipment Manuals, and Aircraft Owner's Manual, or Owner's or Flight Handbook.

(4) For foreign operations, the International Flight Information Manual or a commercial publication that contains the same information concerning the partinent operational and entry requirements of the foreign country or countries involved.

(b) Each certificate holder shall keep its operations personnel informed of each change in equipment and operating procedures, including each known change in the use of navigation aids, airports, air traffic control procedures and regulations, local airport traffic control rules, and known hazards to flight, including icing and other potentially hazardous meteorological conditions and irregularities in ground and navigation facilities.

§ 135.71 Operating information required.

(a) The operator of an aircraft must provide the following materials, in current and appropriate form, accessible to the pilot at the pilot station, and the pilot shall use them:

(1) A cockpit checklist.

(2) In the case of multiengine aircraft or aircraft with retractable landing gear, an emergency cockpit checklist containing the procedures required by paragraph (c) of this section, as appropriate.

(3) Pertinent aeronautical charts.

(4) For IFR operations, each pertinent navigational en route, terminal area, and approach and letdown chart.

(5) In case of multiengine aircraft, one-engine-inoperative climb performance data and if the aircraft is approved for use in IFR or over the top operations, that data must be sufficient to enable the pilot to determine compliance with § 135.151(a)(2).

(b) Each cockpit checklist required by paragraph (a)(1) of this section must contain the following procedures: (1) Before starting engines; (2) Before takeoff; (3) Cruise; (4) Before landing; (5) After landing; (6) Stopping engines.

(c) Each emergency cockpit checklist required by paragraph (a)(2) of this section must contain the following procedures, as appropriate:

(1) Emergency operation of fuel, hydraulic, electrical, and mechanical systems.

(2) Emergency operation of instruments and controls.

(3) Engine inoperative procedures.

(4) Any other emergency procedures necessary for safety.

§ 135.73 Carriage of persons without compliance with the passenger-carrying provisions of this part.

The following persons may be carried aboard an aircraft without complying with the passenger-carrying requirements of this part:

(a) A crewmember.

(b) A person traveling to or from a crewmember or maintenance assignment, when the operator of the aircraft finds that other means of transportation are not practicable.

(c) A person necessary for the safe handling of animals on the aircraft.

(d) A person necessary for the safe handling of hazardous materials (as defined in Subchapter C of Title 49 CFR).

(e) A person performing duty as a security or honor guard accompanying a shipment made by or under the authority of the U.S. Government.

(f) A military courier or a military route supervisor carried by a military cargo contract air carrier or commercial operator in operations under a military cargo contract, if that carriage is specifically authorized by the appropriate military service.

(g) An authorized representative of the Administrator conducting an en route inspection.

(h) A person, authorized by the Administrator, who is performing a duty connected with a cargo operation of the certificate holder.

§ 135.75 Carriage of cargo including carry-on baggage.

No person may carry cargo in or on any aircraft unless—

(a) It is carried in an approved cargo rack, bin, or compartment installed in or on the aircraft;

(b) It is secured by means approved by the Administrator; or

(c) It is carried in accordance with each of the following:

(1) It is properly secured by a safety belt or other tie-down having enough strength to eliminate the possibility of shifting under all normally anticipated flight and ground conditions.

(2) It is packaged or covered to avoid possible injury to occupants.

(3) It does not impose any load on seats or on the floor structure that exceeds the load limitation for those components.

(4) It is not located in a position that obstructs the access to, or use of, any required emergency or regular exit, or the use of the aisle between the crew and the passenger compartment, or located in a position that obscures any passenger's view of the "seat belt" sign "no smoking" sign, or any required exit sign, unless an auxiliary sign or other approved means for proper notification of the passengers is provided.

(5) It is not carried directly above seated occupants.

(6) It is stowed in accordance with the provisions of this section for takeoff and landing.

(7) In the case of cargo only operations, paragraph (c)(4) of this section does not apply if the cargo is loaded in such a manner that at least one emergency or regular exit is available to provide all occupants of the aircraft a means of unobstructed exit from the aircraft in the event of an emergency.

(d) Each passenger seat under which baggage is permitted to be stowed shall be fitted with a means to prevent articles of baggage stowed under it from sliding forward under crash impacts severe enough to induce the ultimate inertia forces specified in the emergency landing condition regulations under which the aircraft was type certificated.

(e) When cargo is carried in cargo compartments that are designed to require the physical entry of a crewmember to extinguish any fire that may occur during flight, the cargo must be loaded in such a manner as to allow a crewmember to effectively reach all parts of the compartment with the contents of a hand fire extinguisher.

§ 135.77 Requirements for use of oxygen.

(a) No person may operate any aircraft—

(1) At cabin pressure altitudes between 10,000 feet (MSL) and 12,000 feet (MSL) inclusive, unless the required minimum flight crew is provided with and uses supplemental oxygen for that part of the flight at those altitudes that is of more than 30 minutes duration,

(2) At cabin pressure altitudes above 12,000 feet (MSL), unless the required minimum flight crew is provided with and uses supplemental oxygen during the entire flight time at those altitudes; and

(3) At cabin pressure altitudes above 12,000 feet (MSL), unless each passenger of the aircraft is provided with supplemental oxygen.

(b) Pressurized cabin aircraft. No person may operate an aircraft with a pressurized cabin—

(1) At flight altitudes above flight level 250, unless at least a 10-minute supply of supplemental oxygen required to satisfy paragraph (a) of this section, is available for each occupant of the aircraft for use in the event that a descent is necessitated by loss of cabin pressurization; and

(2) Unless one pilot at the controls of the airplane is wearing and using an oxygen mask that is secured and sealed, and that either supplies oxygen at all times or automatically supplies oxygen whenever the cabin pressure altitude of the airplane exceeds 12,000 feet (MSL), except that neither pilot need wear and use an oxygen mask while at or below flight level 410 if there are two pilots at the controls and each pilot has a quick-donning type of oxygen mask that can be placed on the face with one hand from the ready position within five seconds, supplying oxygen and properly secured and sealed.

(3) Notwithstanding paragraphs (1) and (2) of this paragraph, if for any reason at any time it is necessary for one pilot to leave his station at the controls of the aircraft when operating at flight altitudes above flight level 250, the remaining pilot at the controls shall put on and use his oxygen mask until the other pilot has returned to his station.

§ 135.79 Oxygen for medical use by passengers.

(a) Except as provided in paragraphs (d) and (e) of this section, no certificate holder may permit the carriage or operation of equipment for the storage, generation or dispensing of medical oxygen unless the unit to be carried is constructed so that all valves, fittings and gauges are protected from damage during such carriage or operation and unless the following requirements are met:

(1) The equipment must be: (i) Of an approved type or in conformity with the manufacturing, packaging, marking, labeling, and maintenance requirements of Title 49 CFR Parts 171, 172, and 173, except § 173.24(a)(1);

(ii) When owned by the certificate holder, maintained in accordance with the certificate holder's approved maintenance program;

(iii) Free of flammable contaminants on all exterior surfaces; and

(iv) Appropriately secured.

(2) When the oxygen is stored in the form of a liquid, the equipment must have been under the certificate holder's approved maintenance program since its purchase new or since the storage container was last purged.

(3) When the oxygen is stored in the form of a compressed gas as defined in Title 49 CFR § 173.300(a)—

(i) When owned by the certificate holder, it must be maintained under his approved maintenance program; and

(ii) The pressure in any oxygen cylinder must not exceed the rated cylinder pressure.

(4) The pilot in command must be advised when the equipment is on board, and when it is intended to be used.

(5) The equipment must be stowed, and each person using the equipment must be seated, so as not to restrict access to or use of any required emergency or regular exit, or of the aisle in the passenger compartment.

(b) No person may smoke and no certificate holder may allow any person to smoke within 10 feet of oxygen storage and dispensing equipment carried in accordance with paragraph (a) of this section.

(c) No certificate holder may allow any person other than a person trained in the use of medical oxygen equipment to connect or disconnect oxygen bottles or any other ancillary component while any passenger is aboard the aircraft.

(d) The provisions of paragraph (a)(1)(i) of this section which prohibit the carriage or operation of equipment for the storage, generation or dispensing of medical oxygen unless that oxygen equipment is of an approved type or in conformity with the manufacturing, packaging, marking, labeling and maintenance requirements of Title 49 CFR Parts 171, 172, and 173, except § 173.24(a)(1), do not apply when that equipment is furnished by a professional or medical emergency service for use on board an aircraft in a medical emergency when no other practical means of transportation (including any other properly equipped certificate holder) is reasonably available and the person carried under the medical emergency is accompanied by a person trained in the use of medical oxygen.

(e) Each certificate holder who, under the authority of this section, deviates from the provisions of paragraph (a)(1)(i) under a medical emergency shall, within 10 days after the deviation, send to the certificate holding FAA Flight Standards District Office a complete report of the operation involved, including a description of the deviation and the reasons for it.

§ 135.81 Autopilot: minimum altitudes for use.

(a) En route operations. Except as provided in paragraphs (b) and (c) of this section, no person may use an automatic pilot en route, including climb and descent, at an altitude above the terrain that is less than twice the maximum altitude loss specified in the aircraft flight manual for a malfunction of the automatic pilot under cruise conditions, or less than 500 feet, whichever is higher.

(b) Approaches. When using an instrument approach facility, no person

may use an automatic pilot at an altitude above the terrain that is less than twice the maximum altitude loss specified in the flight manual for a malfunction of the automatic pilot under approach conditions, or less than 50 feet below the approved minimum descent altitude or decision height for the facility, whichever is higher, except—

(1) When reported weather conditions are less than the basic VFR weather conditions in § 91.105 of this chapter, no person may use an automatic pilot with an approach coupler for ILS approaches at an altitude above the terrain that is less than 50 feet higher than the maximum altitude loss specified in the flight manual for the malfunction of the automatic pilot with approach coupler under approach conditions; and

(2) When reported weather conditions are equal to or better than the basic VFR minimums in § 91.105 of this chapter, no person may use an automatic pilot with an approach coupler for ILS approaches at an altitude above the terrain that is less than the maximum altitude loss specified in the flight manual for the malfunction of the automatic pilot with approach coupler under approach conditions, or 50 feet, whichever is higher.

(c) Notwithstanding paragraphs (a) or (b) of this section, the Administrator may issue operations specifications to allow the use, to touchdown, of an approved flight control guidance system with automatic capability, in any case in which—

(1) The system does not contain any altitude loss (above zero) specified in the flight manual for malfunction of the automatic pilot with approach coupler; and

(2) He finds that the use of the system to touchdown will not otherwise affect the safety standards required by this section.

(d) This section does not apply to operations conducted in rotorcraft under the rules of this part.

§ 135.83 Airmen: limitations on use of services.

(a) No certificate holder may use the services of any person as an airman unless the person performing those services:

(1) Holds an appropriate and current airman certificate issued by the FAA;

(2) Has the required appropriate and valid airman and medical certificate in his possession while engaged in operations under this part; and

(3) Is qualified, under this chapter, for the operation for which he is to be used.

§ 135.85 Aircraft and facilities for recent flight experience.

Each certificate holder shall provide aircraft and facilities to enable each of its pilots to maintain and demonstrate his ability to conduct all operations for which the pilot is authorized.

§ 135.87 Composition of flightcrew.

(a) No certificate holder may operate an aircraft with less than the minimum flight crew specified in the aircraft operating limitations or the Aircraft Flight Manual for that aircraft and required by this part for the kind of operation being conducted.

(b) No certificate holder may operate an aircraft without a second in command if that airplane has a passenger seating configuration, excluding any pilot seat, of ten seats or more.

§ 135.89 Second in command required in IFR conditions.

Except as provided in §§ 135.91 and 135.93 no person may operate an aircraft carrying passengers in IFR conditions, unless there is a second in command in the aircraft.

§ 135.91 Exception to second in command requirement: limited IFR conditions.

Unless two pilots are required by this chapter for operations under VFR, the pilot in command of an aircraft carrying passengers may:

(a) If unforecast weather conditions that are marginal or below the VFR minimums of this part are encountered while en route on a flight which was started and intended to be conducted under the VFR or VFR over-the-top requirements of this part (except for limited IFR operation as permitted under paragraphs (b) (1) and (2) of this section), operate an aircraft in IFR conditions without a second in command if weather reports and forecasts indicate that he will be able to return to VFR or VFR over-the-top operation before reaching a point 15 miles from the destination airport; and

(b) If weather reports and forecasts indicate that the weather along the planned flight route allows flight under the VFR or VFR over-the-top requirements of this part beginning at a point no more than 15 miles from the departure airport and extending to a point within 15 miles of the destination airport, without a second in command:

(1) Take off from the departure airport in IFR conditions and fly in IFR conditions to a point no more than 15 miles from the departure airport; and

(2) Make an IFR approach and land at the destination airport in IFR conditions if:

(i) The weather conditions allow flight, and he flies, clear of the clouds until reaching the prescribed initial approach altitude over the final approach facility; or

(ii) The approach is made with the use of radar as provided in Part 91 of this chapter.

§ 135.93 Exception to second in command requirement: approval for use of autopilot system.

(a) Unless two pilots are required by this chapter for operations under VFR, a person may operate an aircraft without a second in command if it is equipped with an operative autopilot system and the use of that system is authorized by appropriate operations specifications.

(b) The certificate holder may apply for an amendment of his operations specifications to authorize the use of an autopilot system in place of a second in command. The application must contain the make, model, and registration number of each aircraft in which an autopilot is installed and the make and model of each autopilot installed.

(c) The Administrator issues an amendment to the operations specifications authorizing the use of an autopilot system, in place of a second in command, if:

(1) The autopilot is capable of operating the aircraft controls to maintain flight and maneuver it about the three axes; and

(2) The certificate holder shows, to the satisfaction of the Administrator, that operations using the autopilot system can be conducted safely and in compliance with this part.

The amendment contains any conditions or limitations on the use of the autopilot system that the Administrator determines are needed in the interest of safety.

§ 135.95 Flight attendant crewmember requirement.

No certificate holder may operate an aircraft that has a passenger seating capacity of more than 19 unless there is a flight attendant crewmember on board the aircraft.

§ 135.97 Pilot in command or second in command: designation required.

Each certificate holder shall designate a: (a) Pilot in command for each flight; and

(b) Second in command for each flight requiring two pilots.

§ 135.99 Second in command required in Category II operations.

No person may operate an aircraft in a Category II operation unless there is a second in command of the aircraft.

§ 135.101 Passenger occupancy of pilot seat.

No certificate holder may operate an aircraft type certificated after October 15, 1971, that has a passenger seating configuration, excluding any pilot seat, for more than eight passengers if any person other than the pilot in command, a second in command, a company check airman, or an authorized representative of the Administrator, the National Transportation Safety Board, or the Post Office Department occupies a pilot seat.

§ 135.103 Manipulation of controls.

No pilot in command may permit any person to manipulate the flight controls of an aircraft during flight conducted under this part, nor may any person manipulate the controls during such flight unless he is:

(a) A qualified pilot employed by the certificate holder operating that aircraft; or

(b) An authorized safety representative of the Administrator who has the permission of the pilot in command, is qualified in the aircraft, and is checking flight operations.

§ 135.105 Briefing of passengers before flight.

(a) Before each takeoff each pilot in command of an aircraft carrying passen-

gers shall ensure that all passengers have been orally briefed on:

(1) Smoking;

(2) Use of seat belts;

(3) The placement of seat backs in an upright position before takeoff and landing;

(4) Location and means for opening the passenger entry door and emergency exits;

(5) Location of survival equipment;

(6) If the flight involves extended overwater operation, ditching procedures and the use of required flotation equipment; and

(7) If the flight involves operations above 10,000 feet MSL, the normal and emergency use of oxygen;

(8) Location and operation of fire extinguishers.

(b) Before each takeoff the pilot in command shall ensure that each person who may need the assistance of another person to move expeditiously to an exit in the event of an emergency and his attendant, if any, has received a briefing as to the procedures to be followed in the event of an evacuation. The requirements of this paragraph do not apply to a person who has been given a briefing before a previous leg of a flight in the same aircraft.

(c) The oral briefing required by paragraph (a) of this section shall be given by the pilot in command or a member of the crew. It may be supplemented by printed cards for the use of each passenger containing:

(1) A diagram of, and method of operating the emergency exists; and

(2) Other instructions necessary for the use of emergency equipment on board the aircraft.

Each card used under this paragraph must be carried in the aircraft in locations convenient for the use of each passenger and must contain information that is appropriate to the aircraft on which it is to be used.

§ 135.107 Prohibition against carriage of weapons.

No person may, while on board van aircraft being operated by a certificate holder, carry on or about his person a deadly or dangerous weapon, either concealed or unconcealed. This section does not apply to:

(a) Officials or employees of a municipality or a State, or of the United States, who are authorized to carry arms; or

(b) Crewmembers and other persons authorized by the certificate holder to carry arms.

§ 135.109 Alcoholic beverages.

(a) No person may drink any alcoholic beverage aboard an aircraft unless the certificate holder operating the aircraft has served that beverage to him.

(b) No certificate holder may serve any alcoholic beverage to any person aboard its aircraft if that person appears to be intoxicated.

(c) No certificate holder may allow any person to board any of its aircraft if that person appears to be intoxicated.

(d) Each certificate holder shall report to the Administrator, within 5 days after its occurrence, any incident involving the refusal of any person to comply with paragraph (a) of this section, or any disturbance cause by a person who appears to be intoxicated aboard any of its aircraft.

§ 135.111 [Reserved]

§ 135.113 Emergency and emergency evacuation duties.

(a) Each certificate holder shall assign to each required crewmember for each type of aircraft as appropriate, the necessary functions to be performed in an emergency or in a situation requiring emergency evacuation. The certificate holder shall show that those functions can be practicably accomplished, and will meet any reasonably anticipated emergency including incapacitation of individual crewmembers or their inability to reach the passenger cabin because of shifting cargo in combination cargo-passenger aircraft.

(b) The certificate holder shall describe in the manual required under § 135.23 the functions of each category of required crewmembers assigned under paragraph (a) of this section.

Subpart C—Aircraft and Equipment

§ 135.115 Applicability.

This subpart prescribes aircraft and equipment requirements for operations under this part. The requirements of this subpart are in addition to the applicable aircraft and equipment requirements of Part 91 of this chapter. However, this part does not require the duplication of any equipment required by another part.

§ 135.117 General requirements.

(a) No person may operate an aircraft in operations to which this part applies unless that aircraft and its equipment meet the requirements of applicable regulations of this chapter.

(b) No person may operate an aircraft in operations to which this part applies, unless the required instruments and equipment in it have been approved and, for single engine aircraft, are in an operable condition.

(c) ATC transponder equipment must meet the performance and environmental requirements of any Class of TSO–C74b, or Class 1A or Class 1B of TSO–74c, as appropriate, except that the Administrator may approve the use of TSO–C74 or TSO–C74a equipment if the applicant submits data showing that such equipment meets the minimum performance standards of Class 1A or Class 1B of TSO–C74c, and the environmental conditions of the TSO under which it was manufactured.

§ 135.119 [Reserved]

§ 135.121 Aircraft proving tests.

(a) No certificate holder may operate a turbojet-powered airplane, or an aircraft for which two pilots are required by this chapter for operations under VFR, if it has not previously proved that aircraft or an aircraft of the same make and similar design in any operation to which this part applies unless, in addition to the aircraft certification tests, at least 25 hours of proving tests acceptable to the Administrator have been flown by that certificate holder including:

(1) Five hours of night time, if night flights are to be authorized;

(2) Five instrument approach procedures under simulated or actual instrument weather conditions, if IFR flights are to be authorized; and

(3) Entry into a representative number of en route airports as determined by the Administrator.

(b) No certificate holder may carry passengers in an aircraft during proving tests, except those needed to make the tests and those designated by the Administrator to observe the tests. However, pilot flight training may be conducted during the proving tests.

(c) For the purposes of paragraph (a) of this section, an aircraft is considered to be materially altered in design if the alterations include:

(1) The installation of powerplants other than those of a type similar to those with which it is certificated; or

(2) Alterations to the aircraft or its components that materially affect flight characteristics.

(d) This section does not apply to an aircraft of the same make and similar design as an aircraft operated more than 25 hours under this Part by the certificate holder before the date on which this section becomes effective with respect to his operation.

(e) The Administrator may authorize deviation from this section if he finds that special circumstances make full compliance with this section unnecessary.

§ 135.123 Dual controls required.

No person may operate an aircraft in operations requiring two pilots unless that aircraft is equipped with functioning dual controls. However, if the aircraft type certification operating limitations do not require two pilots, a throw-over control wheel may be used in place of two control wheels.

§ 135.125 Equipment requirements: general.

No person may operate an aircraft unless it is equipped with:—(a) A sensitive altimeter that is adjustable for barometric pressure;

(b) Heating or deicing equipment for each carburetor or, in the case of a pressure carburetor, an alternate air source; and

(c) In the case of turbojet-powered airplanes, in addition to two gyroscopic bank-and-pitch indicators (artificial horizons) for use at the pilot stations, a third such instrument that:

(1) Is powered from a source independent of the electrical generating system;

(2) Continues reliable operation for a minimum of 30 minutes after total failure of the electrical generating system;

(3) Operates independently of any other attitude indicating system;

(4) Is operative without selection after total failure of the electrical generating system;

(5) Is located on the instrument panel in a position that will make it plainly visible to, and useable by, any pilot at his station; and

(6) Is appropriately lighted during all phases of operation.

(d) In the case of turbojet-powered airplanes having a passenger seating capacity, excluding any pilot seat, of 10 seats or more,

(1) A lockable door between the pilot and passenger compartment.

(2) An approved cockpit voice recorder that—

(i) Is installed in accordance with the requirements of Part 25 of this chapter.

(ii) Is installed and operated continuously from the use of the check list prior to flight to completion of the final check at the termination of the flight; and

(iii) Has erasure features that may be used so that any time during the operation of the recorder, information recorded more than 30 minutes earlier may be erased or otherwise obliterated.

(iv) In the event of an accident, or occurrence requiring immediate notification of the NTSB which results in termination of the flight, the certificate holder shall keep the recorded information for at least 60 days or, if requested, by the Administrator or the Board, for a longer period. Information obtained from the record may be used to assist in determining the cause of accidents or occurrences in the connection with investigations. The Administrator does not use the record in any civil penalty or certificate action.

(3) An approved Flight Data Recorder from which time, airspeed, vertical acceleration and heading may be determined within the ranges, accuracies, and recording intervals specified in § 37.150 of this chapter and for which the following requirements must be met:

(i) Whenever a flight recorder required by this section is installed, it must be operated continuously from the instant the airplane begins the takeoff roll until it has completed the landing roll at an airport.

(ii) Each certificate holder shall keep the record data prescribed in paragraph (e) (2) (iv) of this section until the airplane has been operated a total of 25 hours of the operating time specified in paragraph (d) (2) (ii). A total of one hour of recorded data may be erased for the purpose of testing the flight recorder system. Any erasure made in accordance with this paragraph must be of the oldest recorded data accumulated at the time of the testing. Except as provided in paragraph (e) of this section, no record need be kept more than 60 days.

(iii) In the event of an accident or occurrence that requires immediate notification of the NTSB under part 830 of its regulations, which result in termination of the flight, the certificate holder shall keep the recorded data required by paragraph (d) (2) (ii) of this section at least 60 days or, if requested by the Board or the Administrator, for a longer period.

(iv) Each flight recorder must be installed in accordance with Part 25 of this chapter

(v) Each flight recorder required by this Part must have an approved device to assist in locating that recorder under water; and

(vi) Each recorder required by this section must record data from which the time of each radio transmission either to or from ATC can be determined.

(4) A Ground Proximity Warning System that meets the performance and environmental standards of § 37.201 and for which the following requirements must be met:

(i) For the Ground Proximity Warning System required by this section, the Airplane Flight Manual shall contain appropriate procedures for:

(A) The use of the equipment, (B) proper flight crew action with respect to the equipment, (C) deactivation for planned abnormal and emergency condition, (E) an outline of all input sources that must be operating.

(ii) No person may deactivate a Ground Proximity Warning System required by this section, except in accordance with procedures contained in the Airplane Flight Manual; and

(iii) Whenever a Ground Proximity Warning System is deactivated, an entry shall be made in the airplane maintenance record that includes the date and time of deactivation.

(e) In the case of aircraft having a passenger seating capacity of more than 19, a public address system and a crewmember interphone system, approved in accordance with § 21.205 of this chapter, which meet the requirements of §§ 121.-318 and 121.319 respectively, of this chapter.

(f) In the case of turbine powered aircraft, such other equipment as the Administrator may require.

§ 135.127 Fire extinguishers: passenger-carrying aircraft.

No person may operate an aircraft carrying passengers unless it is equipped with hand fire extinguishers of an approved type for use in crew and passenger compartments in accordance with the following:

(a) The type and quantity of extinguishing agent must be suitable for the kinds of fires likely to occur.

(b) At least one hand fire extinguisher must be provided and conveniently located on the flight deck for use by the flight crew

(c) At least one hand fire extinguisher must be conveniently located in the passenger compartment of each aircraft having a passenger seating capacity of at least 6 but less than 31 passengers.

§ 135.129 Oxygen equipment requirements.

(a) No person may operate an aircraft in operations to which this part applies unless it is equipped with—

(1) A pressure demand oxygen breathing system capable of supplying the flight crewmembers the minimum mass flow of oxygen required for each flight crewmember to maintain, during inspiration, a minimum of 83.8 mm, HG, oxygen partial pressure when breathing 20 liters per minute BTPS (Body temperature conditions 37°c, ambient pressure, saturated air) at cabin pressure altitudes in excess of flight level 410; and

(2) Enough oxygen dispensers and oxygen to supply the oxygen required by § 135.77 when flying—

(i) At cabin pressure altitudes above 10,000 feet (MSL), up to and including 12,000 feet (MSL), oxygen to at least one occupant of the aircraft other than the pilots, for that part of the flight at those altitudes that is of more than 30 minutes duration; and

(ii) At cabin pressure altitudes above 12,000 feet (MSL), oxygen to each occupant of the aircraft, for one hour unless, at all times during flight above that altitude, the aircraft can safely descend to 14,000 feet (MSL) within 4 minutes, in which case only a 30-minute supply is required.

(b) The equipment required by this section must have a means—

(1) To enable the flight crew to readily determine, in flight, the amount of oxygen available in each source of supply and whether the oxygen is being delivered to the dispensing units; or

(2) In the case of individual dispensing units, to enable each user to make those determinations with respect to his oxygen supply and delivery; and

(3) To allow the flightcrew to use undiluted oxygen at their discretion.

§ 135.131 Equipment requirements: carrying passengers under VFR at night or under VFR over-the-top conditions.

No person may operate an aircraft carrying passengers under VFR at night or under VFR over-the-top, unless it is equipped with:

(a) A gyroscopic rate-of-turn indicator or combined with a slip-skid indicator;

(b) A gyroscopic bank-and-pitch indicator;

(c) A gyroscopic direction indicator;

(d) A generator or generators able to supply all probable combinations of continuous inflight electrical loads for required equipment and for recharging the battery; and

(e) In the case of night flights—

(1) An anticollision light system;

(2) Instrument lights to make all instruments, switches, and gauges easily readable, the direct rays of which are shielded from the pilot's eyes; and

(3) A flashlight having at least two size "D" cells or equivalent. For the purposes of paragraph (d) of this section, a continuous electrical load includes one that draws current continuously during flight, such as radio equipment, electrically driven instruments, and lights, but does not include occasional intermittent loads.

§ 135.133 Radio and navigational equipment: carrying passengers under VFR at night or under VFR over-the-top.

(a) No person may operate an aircraft carrying passengers under VFR at night, or under VFR over-the-top, unless that aircraft has two-way radio communications equipment able, at least in flight, to transmit to, and receive from, ground facilities 25 miles away.

(b) No person may operate an aircraft carrying passengers under VFR at night, or under VFR over-the-top, unless it has radio navigational equipment able to receive radio signals from the ground facilities to be used.

§ 135.135 Equipment requirements: aircraft carrying passengers under IFR.

No person may operate an aircraft under IFR, carrying passengers, unless it has—

(a) A vertical speed indicator;

(b) A free-air temperature indicator;

(c) A heated pitot tube for each airspeed indicator;

(d) A power failure warning device or vacuum indicator to show the power available for gyroscopic instruments from each power source:

(e) An alternate source of static pressure for the altimeter and the airspeed and vertical speed indicators;

(f) In the case of a single-engine aircraft a generator or generators able to supply all probable combinations of continuous inflight electrical loads for required equipment and for recharging the battery;

(g) In the case of multiengine aircraft at least two generators each of which is on a separate engine, of which any combination of one-half of the total number are rated sufficiently to supply the electrical loads of all required instruments and equipment necessary for safe emergency operation of the aircraft; and

(h) Two independent sources of energy (with means of selecting either), of which at least one is an engine-driven pump or generator, each of which is able to drive all gyroscopic instruments and installed so that failure of one instrument or source does not interfere with the energy supply to the remaining instruments or the other energy source, unless, in the case of a single-engine aircraft, the rate-of-turn indicator has a source of energy separate from the bank and pitch and direction indicators. For the purpose of paragraph (f) of this section, a continuous electrical load includes one that draws current continuously during flight, such as radio equipment, electrically driven instruments, and lights, but does not include occasional intermittent loads. For the purpose of paragraph (h) of this section, in the case of a multiengine aircraft, each engine-driven source of energy must be on a different engine.

§ 135.137 Radio and navigational equipment: under extended overwater or IFR operations.

(a) No person may operate a turbojet airplane having a passenger seating capacity, excluding any pilot seat, of 10 seats or more, or a mutliengine airplane carrying passengers as a "Commuter Air Carrier" as defined in Part 298 of this title, under IFR or in extended overwater operations unless it has at least the following radio communications and navigational equipment appropriate to the facilities to be used which are capable of transmitting to, and receiving from, at any place on the route to be flown, at least one ground facility:

(1) Two transmitters; (2) two microphones; (3) two headsets on one headset and one speaker, (4) a marker beacon receiver, (5) two independent VOR receivers for navigation, (6) two independent receivers for communications.

(b) No person may operate an aircraft other than that specified in paragraph (a) of this section, under IFR or in extended overwater operations unless it has at least the following radio communication and navigational equipment appropriate to the facilities to be used and which are capable of transmitting to, and receiving from, at any place on the route; at least one ground facility:

(1) A transmitter, (2) two microphones, (3) two headsets or one headset and one speaker, (4) a marker beacon receiver, (5) two independent receivers for navigation, (6) two independent receivers or communications, (7) for extended overwater operations only, an additional transmitter

(c) For the purpose of paragraphs (a) (5) and (6), and (b) (5) and (6) of this section, a receiver is independent if the function of any part of it does not depend on the functioning of any part of another receiver. However, a receiver that can receive both communications and navigational signals may be used in place of a separate communications receiver and a separate navigational signal receiver.

§ 135.139 Emergency equipment: extended overwater operations.

(a) No person may operate an aircraft in extended overwater operations unless it carries, installed in conspicuously marked locations easily accessible to the occupants in the event of a ditching, the following equipment:

(1) A life preserver equipped with an approved survivor locator light, for an approved flotation means, for each occupant of the aircraft. The life preserver or other flotation means must be easily accessible to each seated occupant. If a flotation means other than a life preserver is used, it must be readily removable from the aircraft.

(2) Enough life rafts (with proper buoyancy) to carry all occupants of the aircraft, and at least the following equipment for each raft clearly marked for easy identification—

(i) One canopy (for sail, sunshade, or for rain catcher),

(ii) One radar reflector (or similar device),

(iii) One life raft repair kit;

(iv) One bailing bucket;

(v) One signaling mirror;

(vi) One police whistle;

(vii) One raft knife;

(viii) One CO_2 bottle for emergency inflation;

(ix) One inflation pump;

(x) Two oars;

(xi) One 75-foot retaining line;

(xi) One magnetic compass;

(xiii) One dye marker;

(xiv) One flashlight having at least two size "D" cells or equivalent;

(xv) At least one approved pyrotechnic signaling device;

(xvi) A two-day supply of emergency food rations supplying at least 1,000 calories a day for each person;

(xvii) One sea water desalting kit for each two persons the raft is rated to carry, or two pints of water for each person the raft is rated to carry;

(xviii) One fishing kit; and

(xix) One book on survival appropriate for the area in which the aircraft is operated.

(b) No person may operate an aircraft in extended overwater operations unless there is attached to one of the life rafts required by paragraph (a) of this section, a survival type emergency locator transmitter that meets the applicable requirements of § 37.200 of this chapter. Batteries used in this transmitter must be replaced (or recharged, if the battery is rechargeable) when the transmitter has been in use for more than 1 cumulative hour, and also when 50 percent of their useful life (or for rechargeable batteries, 50 percent of their useful life of charge), as established by the transmitter manufacturer under § 37.200(g)(2) of this chapter, has expired. The new expiration date for the replacement (or recharged) battery must be legibly marked on the outside of the transmitter. The battery useful life (or useful life of charge) requirements of this paragraph do not apply to batteries (such as water-activated batteries) that are essentially unaffected during probable storage intervals.

§ 135.141 Additional airworthiness requirements.

(a) No person may operate a large airplane in operations to which this Part applies unless that airplane meets the additional airworthiness requirements of §§ 121.213 through 121.283 and 121.307 and 121.312 of this chapter.

(b) No person may operate a reciprocating engine or turbopropeller powered small airplane in operations to which this Part applies that has a passenger seating configuration, excluding any pilot seat, of 10 seats or more unless that airplane is type certificated—

(1) In the transport category;

(2) Before July 1, 1970, in the normal category and meets special conditions issued by the Administrator for airplanes intended for use in operations under this part.

(3) Before July 19, 1970, in the normal category and meets the additional airworthiness standards in SFAR No. 23; or

(4) In the normal category and meets the additional airworthiness standards prescribed in Appendix A of this Part.

(c) No person may operate a small airplane that is type certificated in ac-

cordance with other than Part 25 of this chapter with a passenger seating configuration, excluding any pilot seat, of 10 seats or more, unless the airplane was approved for operations to which this part applies prior to August 19, 1977.

(d) No person may operate a small airplane that is type certificated in accordance with other than Part 25 of this chapter with a passenger seating configuration, excluding any pilot seat, of 10 seats or more, with a seating configuration greater than the maximum seating configuration approved for operations to which this part applies prior to August 19, 1977.

(e) Notwithstanding the provisions of paragraph (b) of this section, after June 30, 1984, no person may operate a reciprocating engine or turbopropeller powered small airplane in operations to which this part applies that has a passenger seating configuration, excluding any pilot seat, of 10 seats or more, unless that airplane is type certificated in the transport category. This kind of an airplane, if not type certificated in the transport category, may be operated—

(1) Until June 30, 1980, if the airplane was type certificated in the normal category and meets special conditions issued by the Administrator;

(2) Until June 30, 1982, if the airplane was type certificated in the normal category and meets the additional airworthiness standards of SFAR 23; or

(3) Until June 30, 1984, if the airplane was type certificated in the normal category and meets additional airworthiness requirements prescribed in Appendix A of this part.

§ 135.143 Shoulder harness installation at flight crewmember stations.

(a) No person may operate a turbojet-powered aircraft or an aircraft having a passenger seating capacity, excluding any pilot seat, of 10 seats or more in operations to which this part applies unless that aircraft is equipped with an approved shoulder harness installed for each front seat.

(b) Each flight crewmember occupying a seat equipped with a shoulder harness must fasten the shoulder harness during takeoff and landing, except that the shoulder harness may be unfastened if the crewmember cannot perform the required duties with the shoulder harness fastened.

§ 135.145 Airborne thunderstorm detection equipment requirements.

(a) No person may operate a multiengine aircraft that has a passenger seating configuration, excluding any pilot seat, of 10 seats or more under the rules of this part in passenger-carrying operations unless approved thunderstorm detection equipment has been installed in the aircraft.

(b) No person may begin a flight under IFR or night VFR conditions when current weather reports indicate that thunderstorms, or other potentially hazardous weather conditions that can be detected with airborne thunderstorm detection equipment, may reasonably be expected along the route to be flown, unless the airborne thunderstorm detection equipment is in satisfactory operating condition.

(c) If the airborne thunderstorm detection equipment becomes inoperative en route, the aircraft must be operated in accordance with the instructions and procedures specified in the manual required by § 135.23 for such an event.

(d) This section does not apply to aircraft used solely within the State of Hawaii or within the State of Alaska or within and that part of Canada west of longitude 130 degrees W, between latitude 70 degrees N, and latitude 53 degrees N, or during any training, test, or ferry flight.

(e) Notwithstanding any other provision of this part, an alternate electrical power supply is not required for airborne thunderstorm detection equipment.

§ 135.147 Emergency equipment requirements for aircraft having a passenger seating capacity of more than 19 passengers.

(a) No certificate holder may operate an aircraft having a passenger seating capacity of more than 19 passengers unless it is equipped with the following emergency equipment.

(1) One approved first aid kit for treatment of injuries likely to occur in flight or in a minor accident, which meets the following specifications and requirements:

(i) Each first aid kit must be dust and moisture proof, and contain only materials that either meet Federal Specifications GGK–319a, as revised, or as approved by the Administrator

(ii) Required first aid kits must be readily accessible to the cabin flight attendants.

(iii) At time of takeoff, each first aid kit must contain at least the following or other contents approved by the Administrator.

Contents:

	Quantity
Adhesive bandage compressors, 1 in	16
Antiseptic swabs	20
Ammonia inhalents	10
Bandage Compressors, 4 in	8
Triangular bandage compressors, 40 in	5
Burn compound, ⅛ oz. or an equivalent of other burn remedy	6
Arm splint, noninflatable	1
Leg splint, noninflatable	1
Roller bandage, 4 in	4
Adhesive tape, 1-in standard roll	2
Bandage scissors	1

(2) A crash axe carried so as to be accessible to the crew but inaccessible to passengers during normal operations

(3) Signs that are visible to all occupants to notify them when smoking is prohibited and when safety belts should be fastened. The signs must be so constructed that they can be turned on and off by a crewmember. They must be turned on for each takeoff and each landing and when otherwise considered to be necessary by the pilot in command;

(4) In the case of airplanes, the additional emergency equipment specified in § 121.310 of this chapter; and

(5) Each item of equipment must be inspected regularly in accordance with inspection periods established in the operations specifications to ensure its condition for continued serviceability and immediate readiness to perform its intended emergency purposes.

§ 135.149 Inoperable instruments and equipment for multiengine aircraft.

(a) No person may take off any multiengine aircraft for an operations to which this part applies unless the following instructions and equipment are in an operable condition:

(1) Instruments and equipment specifically required by the airworthiness requirements under which the aircraft is type certificated and which are essential for safe operations under all operating conditions.

(2) Instruments and equipment required by an airworthiness directive to be in operable condition unless otherwise provided in the airworthiness directive.

(3) Instruments and equipment, other than those covered under paragraph (a) (1) of this section, whose proper operation is necessary for the aircraft to continue to comply with the airworthiness requirements under which the aircraft is type certificated, except those requirements applicable to—

(i) Non-required instruments and equipment; and

(ii) Instruments and equipment not essential to the safe operation of the aircraft.

(b) No person may take off any multiengine aircraft to which this part applies with inoperable instruments or equipment installed, other than those covered under paragraph (a) of this section, unless the following requirements are met:

(1) An Approved Minimum Equipment list exists for the aircraft type.

(2) The aircraft has within it a letter of authorization, issued by the Flight Standards District Office having certification responsibility for that ATCO certificate holder, authorizing operation of the aircraft in accordance with the Minimum Equipment List.

The letter of authorization may be obtained by written request of the certificate holder. The Minimum Equipment List and the letter of authorization together constitute a supplemental type certificate for the aircraft.

(3) The approved Minimum Equipment List provides for the operation of the aircraft with the inoperable instruments and equipment inoperable.

(4) The aircraft records available to the pilot include an entry describing the inoperable instruments and equipment.

(5) The aircraft is operated in accordance with all applicable conditions and limitations contained in the Minimum

Equipment List and in the letter authorizing the use of the list.

(c) Notwithstanding the requirements of paragraphs (a)(1), (a)(3), and (c) of this section, an aircraft with inoperable instruments or equipment may be operated under a special flight permit in accordance with the requirements of §§ 21.197 and 21.199 of this chapter.

§ 135.151 Performance requirements: aircraft operated over-the-top or in IFR conditions.

(a) Except as provided in paragraphs (b) and (c) of this section, no person may—

(1) Operate a single-engine aircraft carrying passengers over-the-top or in IFR conditions; or

(2) Operate a multiengine aircraft carrying passengers over-the-top or in IFR conditions at a weight that will not allow it to climb, with the critical engine inoperative, at least 50 feet a minute when operating at the MEAs of the route to be flown or 5,000 feet MSL, whichever is higher.

(b) Without regard to paragraph (a)(1) or (2) of this section—

(1) If weather reports and forecasts, or any combination thereof, indicate that the weather along the planned route (including takeoff and landing) allow flight under VFR under the ceiling (if a ceiling exists) and that ceiling is forecast to remain so at every reporting point ahead on the route until at least 1 hour after the estimated time of arrival at the point, a person may operate an aircraft in IFR conditions, or "over-the-top"; and

(2) If weather reports and forecasts or any combination thereof indicate that the weather along the planned route allows flight under VFR conditions under the ceiling (if a ceiling exists), beginning at a point no more than 15 miles from the departure airport and extending to a point within 15 miles of the destination airport, a person may—

(i) Take off from the departure airport in IFR conditions and fly in IFR conditions to a point no more than 15 miles from the departure airport;

(ii) Operate an aircraft en route over-the-top;

(iii) If unforecast marginal VFR weather conditions are encountered while en route on a flight which was started and intended to be conducted under the VFR or VFR over-the-top requirements of this part (except for limited IFR operation as permitted under subdivisions (i) and (iv) of this paragraph), operate an aircraft in IFR conditions if weather reports and forecasts or any combination thereof indicate that he will be able to return to VFR or VFR over-the-top operation before reaching a point 15 miles from the destination airport; and (iv) Make an IFR approach and land at the destination airport in IFR conditions if the weather conditions allow flight, and he flies, clear of the clouds from a point en route at least 15 miles from the destination airport until reaching the prescribed initial approach altitude over the final approach facility or if the approach is made with the use of radar as provided in Part 91 of this chapter.

(c) Without regard to paragraphs (a)(1) and (2) of this section, a person may operate an aircraft over-the-top under conditions allowing—

(1) In the case of a multiengine aircraft, descent or continuance of the flight under VFR if its critical engine fails; or

(2) In the case of a single-engine aircraft, descent under VFR if its engine fails.

§ 135.153 Performance requirements: land aircraft operated over water.

No person may operate a land aircraft carrying passengers over water unless—

(a) It is operated at an altitude that allows it to reach land in the case of engine failure;

(b) It is necessary for takeoff or landing;

(c) It is a multiengine aircraft operated at a weight that will allow it to climb, with the critical engine inoperative, at least 50 feet a minute, at an altitude of 1,000 feet above the surface; or

(d) It is a helicopter equipped with helicopter flotation devices.

§ 135.155 Small airplane performance operating limitations.

(a) No person may operate a reciprocating engine powered small transport category airplane unless he complies with the weight limitations prescribed in § 135.275 of this chapter, the takeoff limitations prescribed in § 135.277 (except paragraph (a)(3)), and the landing limitations prescribed in § 135.285 and § 135.287.

(b) No person may operate a turbine engine powered small transport category airplane unless he complies with the takeoff limitations prescribed in § 135.289 of this chapter (except paragraphs (d) and (f)) and the landing limitations prescribed in § 135.295 and § 135.298.

(c) No person may operate a reciprocating engine or turbopropeller powered small airplane that is certificated in accordance with paragraphs (b)(2), (3), and (4) of § 135.141, unless he complies with the takeoff weight limitations prescribed in the Airplane Flight Manual for operations under this part, and if the airplane is certificated in accordance with paragraph (b)(4) of § 135.141 with the landing weight limitations prescribed in the Airplane Flight Manual for operations under this part.

§ 135.157 Empty weight and center of gravity: currency requirement.

(a) No person may operate a multiengine aircraft in operations to which this part applies unless the current empty weight and center of gravity are calculated from values established by actual weighing of the aircraft within the preceding 36 calendar months.

(b) Paragraph (a) of this section does not apply to—

(1) Aircraft issued an original airworthiness certificate within the preceding 36 calendar months; and

(2) Aircraft operated under a weight and balance system approved in the operations specifications of the certificate holder.

Subpart D—VFR/IFR Operating Limitations and Weather Requirements

§ 135.159 Applicability.

This subpart prescribes the operating limitations for VFR/IFR flight operations and associated weather requirements for operations under this part.

§ 135.161 VFR: minimum altitudes.

Except when necessary for takeoff and landing, no person may operate, under VFR—

(a) An airplane—

(1) During the day, below 500 feet above the surface or less than 500 feet horizontally from any obstacle; or

(2) At night, at an altitude less than 1,000 feet above the highest obstacle within a horizontal distance of 5 miles from the course intended to be flown or, in designated mountainous terrain, less than 2,000 feet above the highest obstacle within a horizontal distance of 5 miles from the course intended to be flown; or

(b) A helicopter over a congested area at an altitude less than 300 feet above the surface.

§ 135.163 VFR: visibility requirements.

(a) No person may operate an airplane under VFR, in uncontrolled airspace at night, or in uncontrolled airspace during the day when the ceiling is less than 1,000 feet, unless flight visibility is at least 2 miles.

(b) No person may operate a helicopter under VFR in uncontrolled airspace at an altitude of 1,200 feet or less above the surface or in control zones unless the visibility is at least—

(1) During the day—½ mile; or

(2) At night—1 mile.

§ 135.165 VFR: helicopter surface reference requirements.

No person may pilot a helicopter under VFR unless he has visual surface reference or, at night, visual surface light reference, sufficient to safely control the helicopter.

§ 135.167 VFR: fuel supply.

(a) No person may begin a flight operation in an airplane under VFR unless, considering wind and forecast weather conditions, it has enough fuel to fly to the first point of intended landing and, assuming normal cruising fuel consumption—

(1) During the day, to fly thereafter for at least 30 minutes; or

(2) At night, to fly thereafter for at least 45 minutes.

(b) No person may begin a flight operation in a helicopter under VFR unless, considering wind and forecast weather conditions, it has enough fuel to fly to the first point of intended landing and, assuming normal cruising fuel consumption, to fly thereafter for at least 20 minutes.

§ 135.169 VFR Over-the-top carrying passengers: operating limitations.

Subject to any additional limitations contained in § 135.151, no person may operate an aircraft VFR over-the-top carrying passengers, unless—

(a) Weather reports and forecasts, or any combination thereof, indicate that the weather at the intended point of termination of over-the-top flight—

(1) Allows descent to beneath the ceiling under VFR and is forecast to remain so until at least 1 hour after the estimated time of arrival at that point; or

(2) Allows an IFR approach and landing with flight clear of the clouds until reaching the prescribed initial approach altitude over the final approach facility, unless the approach is made with the use of radar as provided in § 91.116(f) of this chapter; or

(b) It is operated under conditions allowing—

(1) In the case of multiengine aircraft, descent or continuation of the flight under VFR if its critical engine fails; or

(2) In the case of single-engine aircraft, descent under VFR if its engine fails.

§ 135.171 Weather reports and forecasts.

(a) Whenever a person operating an aircraft in operations to which this part applies is required to use a weather report or forecast, he shall use that of the U.S. National Weather Service, a source approved by the U.S. National Weather Service, or a source approved by the Administrator. However, in the case of operations under VFR, the pilot in command may, if such a report is not available, use weather information based on his own observations or on those of other persons competent to supply appropriate observations.

(b) For the purposes of paragrah (a), weather observations made and furnished to pilots to control IFR operations at an airport must be taken at the airport where those IFR operations are conducted, unless the Administrator issues operations specifications allowing the use of weather observations taken at a location other than on the airport where the IFR operations are conducted. The Administrator issues such operations specifications whenever, after investigation by the U.S. National Weather Service and the FAA Flight Standards District Office having jurisdiction over the area in which the airport is located, it is found that the standards of safety for such an operation would allow the deviation from the requirements of this paragraph for a particular operation for which an ATCO operating certificate has been issued.

§ 135.173 [Reserved]

§ 135.175 IFR: operating limitations.

(a) Except as provided in paragraphs (b), (c) and (d) of this section, no person may operate an aircraft, under IFR, outside of controlled airspace or at any airport that does not have an approved standard instrument approach procedure.

(b) The Administrator may issue operations specifications to the certificate holder to allow him to operate IFR over routes outside controlled airspace if—

(1) The certificate holder shows the Administrator that his flight crew is able to navigate, without visual reference to the ground, over an intended track without deviating more than 5 degrees or 5 miles, whichever is less, from that track; and

(2) The Administrator otherwise determines that the proposed operations can be conducted safely.

(c) A person may operate an aircraft under IFR outside of controlled airspace when it is necessary for the conduct of an instrument approach to an airport for which there is in use a current approved standard or special instrument approach procedure; or when it is necessary to climb into controlled airspace during an approved missed approach procedure; or when it is necessary to make an IFR departure from an airport having an approved instrument approach procedure; and the certificate holder has been approved for such operations.

(d) The Administrator may issue operations specifications to the certificate holder to allow him to depart at an airport that does not have an approved standard instrument approach procedure when the Administrator determines that it is necessary to make an IFR departure from that airport and that the proposed operations can be conducted safely; however, the approval to operate at that airport does not include approval to make an IFR approach to that airport.

§ 135.177 IFR: takeoff limitations.

No person may take off an aircraft under IFR from an airport where weather conditions are at or above take off minimums but are below authorized IFR landing minimums unless there is an alternate airport within 1 hour's flying time (at normal cruising speed, in still air) of the airport of departure.

§ 135.179 IFR: destination airport weather minimums.

No person may take off an aircraft under IFR or begin an IFR or over-the-top operation unless the latest weather reports and forecasts, or any combination thereof, indicate that weather conditions, at the estimated time of arrival at the next airport of intended landing will be at or above authorized IFR landing minimums.

§ 135.181 IFR: alternate airport weather minimums.

No person may designate an alternate airport unless the weather reports and forecasts, or any combination thereof, indicate that the weather conditions will be at or above authorized alternate airport landing minimums for that airport at the estimated time of arrival.

§ 135.183 IFR: alternate airport requirements.

(a) Except as provided in paragraph (b) of this section, no person may operate an aircraft in IFR conditions unless it carries enough fuel (considering weather reports and forecasts) to—

(1) Complete the flight to the first airport of intended landing;

(2) Fly from that airport to the alternate airport; and

(3) Fly thereafter for 45 minutes at normal cruising speed.

(b) Paragraph (a)(2) of this section does not apply if Part 97 of this chapter prescribes a standard instrument approach procedure for the first airport of intended landing and, for at least one hour before and after the estimated time of arrival, the appropriate weather reports and forecasts, or any combination thereof, indicate that:

(1) The ceiling will be at least 1,500 feet above the lowest circling MDA, or;

(2) If circling is not authorized for the airport, the ceiling will be at least 1,500 feet above the lowest published minimum or 2,000 feet above the airport elevation, whichever is higher; and

(3) Visability for that airport is forecast to be at least three miles, or two miles more than the lowest applicable visibility minimums, whichever is the greater, for the instrument approach procedure to be used at the destination airport.

§ 135.185 IFR: takeoff, approach and landing minimums.

(a) No pilot may begin an instrument approach procedure to an airport unless:

(1) That airport has a weather reporting facility operated by the U.S. National Weather Service, a source approved by U.S. National Weather Service, or a source approved by the Administrator; and

(2) The latest weather report issued by that weather reporting facility indicates that weather conditions are at or above the authorized IFR landing minimums for that airport.

(b) No pilot may begin the final approach segment of an instrument approach procedure to an airport unless the U.S. National Weather Service, a source approved by the U.S. National Weather Service, or a source approved by the Administrator, issues a weather report for that airport and unless the latest weather reported indicates that weather conditions are at or above the authorized IFR landing minimums for that airport.

(c) If a pilot has begun the final approach segment of an instrument approach to an airport in accordance with paragraph (b) of this section and a later weather report indicating below minimum conditions is received after the aircraft is:

(1) On an ILS final approach and has passed the outer marker;

(2) On an ASR or PAR final approach and has been turned over to the final approach controller or;

(3) On a final approach using a VOR, NDB, or comparable approach procedure and:

(i) has passed the appropriate facility or final approach fix; or

(ii) where a final approach fix is not specified, has completed the procedure turn and is established inbound toward the airport on the final approach course within the distance prescribed in the procedure;

The approach may be continued and a landing made if the pilot finds, upon reaching the authorized MDA or DH, that actual weather conditions are at least equal to the minimums prescribed for the procedure.

(d) The MDA or DH and visibility landing minimums prescribed in Part 97 of this chapter or in the operator's operations specifications are increased by 100 feet and ½ mile respectively, but not to exceed the ceiling and visibility minimums for that airport when used as an alternate airport, for each pilot in command of a turbine-powered airplane who has not served at least 100 hours as pilot in command in that type of airplane.

(e) Each pilot making an IFR takeoff or approach and landing at a military or foreign airport shall comply with applicable instrument approach procedure and weather minimums prescribed by the authority having jurisdiction over that airport. In addition, no pilot may, at such an airport:

(1) Take off under IFR when the visibility is less than 1 mile; or

(2) Make an instrument approach when the visibility is less than ½ mile.

(f) If takeoff minimums are specified in Part 97 of this chapter for the takeoff airport, no pilot may take off an aircraft under IFR when the weather conditions reported by the U.S. National Weather Service, a source approved by the U.S. National Weather Service, or a source approved by the Administrator, are less than the takeoff minimums specified for the takeoff airport in Part 97 or in the certificate holder's operations specifications.

(g) Except as provided in paragraph (h) of this section, if takeoff minimums are not prescribed in Part 97 of this chapter for the takeoff airport, no pilot may take off an aircraft under IFR when the weather conditions reported by the U.S. National Weather Service, a source approved by the U.S. National Weather Service, or a source approved by the Administrator, are less than that prescribed in Part 91 of this chapter or in the certificate holder's operations specifications.

(h) At airports where straight-in instrument approach procedures are authorized, a pilot may take off an aircraft under IFR when the weather conditions reported by the U.S. National Weather Service, a source approved by the U.S. National Weather Service, or a source approved by the Administrator, are equal to or better than the lowest straight-in landing minimums, unless otherwise restricted, provided that:

(1) The wind direction and velocity at the time of takeoff are such that a straight-in instrument approach can be made to the runway served by the instrument approach;

(2) The system and the associated ground facilities and related airborne equipment upon which the landing minimums are predicated are in normal operation;

(3) The certificate holder has been approved for such operations; and

(4) The pilot meets the proficiency required by § 135.229.

§ 135.187 Icing conditions: operating limitations.

(a) No pilot may take off an aircraft that has: (1) Frost, snow, or ice adhering to any windshield or powerplant installation; or to an airspeed, altimeter, rate of climb or flight attitude instrument system;

(2) Snow or ice adhering to the wings, or stabilizing or control surfaces, or rotor, or propellers of the aircraft; or

(3) Any frost adhering to the wings, or rotors, or propellers of the aircraft; or rotors or propellers of the aircraft, unless the wings, or stabilizing or control surfaces, or rotors or propellers have been smoothed to prevent the disruption by the frost of airflow over such surfaces;

(b) No pilot may take off an aircraft, for flight under VFR, or continue to operate an aircraft in flight under VFR, into known or forecast icing conditions unless the aircraft has installed functioning de-icing or anti-icing equipment protecting each rotor blade, propeller, windshield, wing, stabilizing or control surface, and each airspeed, altimeter, rate of climb, or flight attitude instrument system.

(c) No pilot may take off an aircraft, for flight under IFR, or continue to operate an aircraft in flight under IFR, into known or forecast icing conditions unless the aircraft has installed functioning de-icing or anti-icing equipment which meets the certification requirements of Section 34 of Special Federal Aviation Regulation No. 23, or Part 23 effective November 19, 1973, or those for transport category aircraft type certification as applicable to that aircraft.

(d) If current weather reports and briefing information relied upon by the pilot in command indicate the forecast icing condition that would otherwise prohibit the flight will not be encountered during the flight because of changed weather conditions since the forecast, the restrictions in paragraphs (b) and (c) of this section based on forecast conditions do not apply.

§ 135.189 Airport requirements and emergency lighting.

(a) No certificate holder may use any airport unless it is properly equipped and adequate for the proposed operation, considering such items as size, surface, obstructions, facilities, public protection, and lighting.

(b) Except in the case of an emergency, no person may conduct night operations with the use of flare pots or lanterns to mark the limits of the area to be used for takeoff or landing.

(c) In the case of the emergency use of flare pots or lanterns, the lighting provided must be spaced at a uniform interval of not more than 200-feet along both edges of the usable runway.

(d) Except under the provisions of paragraphs (b) and (c) of this section, no person may conduct night takeoffs and landings in a large or turbojet-powered airplane when flare pots or lanterns have been substituted for more than 25 percent of the runway edge lights for the runway to be used.

(e) Except as provided in paragraphs (b) (c) and (d) of this section, no person may operate an aircraft in operations to which this part applies using any type of lighting to mark the limits of the area to be used for takeoff or landing unless that type of lighting has been specifically approved by the Administrator.

Subpart E—Flight Crewmember Requirements

§ 135.191 Applicability.

This subpart prescribes the flight crewmember requirements for operations under this part.

§ 135.193 Pilot in command qualifications.

(a) No pilot, in passenger-carrying operations, may act as pilot in command of a turbojet-powered airplane, or an airplane having a passenger seating capacity, excluding any pilot seat, of 10 seats or more, or a multiengine airplane being operated by a "commuter air carrier" as defined in Part 298 of this title, unless he holds an airline transport pilot certificate with appropriate category and class ratings and, if required, an appropriate type rating for that aircraft.

(b) Except as provided in paragraph (a) of this section, no pilot may act as pilot in command of an aircraft under VFR unless:

(i) He holds at least a commercial pilot certificate with appropriate category and class ratings and, if required, an appropriate type rating for that aircraft;

(ii) He has had at least 500 hours time as a pilot, including at least 100 hours of cross-country flight time, at least 25 hours of which were at night; and

(iii) In the case of an airplane, he holds an instrument rating or an airline transport pilot certificate with an airplane category rating; or

(iv) In the case of helicopter operations conducted VFR over-the-top, he holds a helicopter instrument rating, or an airline transport pilot certificate with a category and class rating for that aircraft, not limited to VFR.

(c) Except as provided in paragraph (a) of this section, no pilot may act as pilot in command of an aircraft under IFR unless:

(i) He holds at least a commercial pilot certificate with appropriate category and class ratings and, if required, an appropriate type rating for that aircraft; and

(ii) He has had at least 1,200 hours of flight time as a pilot, including 500 hours of cross country flight time, 100 hours of night flight time, and 75 hours of actual or simulated instrument time, at least 50 hours of which were in actual flight; and

(iii) In the case of an airplane, he holds an instrument rating or an airline transport pilot certificate with an airplane category rating; or

(iv) In the case of helicopters, he holds a helicopter instrument rating, or an airline transport pilot certificate with a category and class rating for that aircraft, not limited to VFR.

§ 135.195 [Reserved]

§ 135.197 Second in command qualifications.

No person may act as second in command of an aircraft unless he holds at least a commercial pilot certificate with appropriate category and class ratings and an instrument rating. In the case of flight under IFR he must have met the recent instrument experience requirements of Part 61 of this chapter.

§ 135.199 Pilot qualifications: recent experience.

(a) No certificate holder may use any person nor may any person serve as a pilot flight crewmember, unless, within the preceding 90 days, that person has made at least three takeoffs and three landings as the sole manipulator of the flight controls in an aircraft of the same category and class and, if type rating is required, of the same type in which he is to serve.

(b) For the purposes of paragraph (a) of this section, if the aircraft is a tailwheel airplane, the takeoffs and landings must have been made to a full stop in a tailwheel airplane.

Subpart F—Flight Crewmember Flight and Duty Time Limitations and Rest Requirements

§ 135.200 Applicability.

This subpart prescribes flight and duty time limitations and rest requirements for flight crewmembers utilibed by air taxi and commercial operators certificated under this part.

§ 135.201 Definition of terms.

For the purposes of this subpart:—

"Augmented flight crew" means a flight crew which includes one or more relief officers in addition to the basic flight crew.

"Basic flight crew" means the minimum flight crew required by the aircraft type certificate.

"Boarding point or location" means the place at which passengers, cargo or crewmembers are enplaned for the purpose of flight, or are deplaned after a flight.

"Deadhead transportation" means transportation, not local in character, that a certificate holder requires and provides to transport a crewmember to or from a duty station.

"Duty period" means the time between successive, required rest periods during which a crewmember accumulates duty time.

"Duty time" means the time during which a flight crewmember performs any required assignment for a certificate holder or accumulates flight time in other commercial or military operations. Duty time also includes time spent on the ground between flights in the same duty period.

"Flight time" means the time during which a flight crewmember serves as either a pilot in command, or second in command, in any operations for a certificate holder, or in other commercial or military operations. Flight time begins when the aircraft departs the boarding point for the purpose of flight and ends when the aircraft arrives at a boarding point or location after landing, except that, in the case of rotorcraft, flight time means a period of time which begins when the rotor starts turning under engine power for the purpose of flight and ends when the engine is shut down at the end of the flight.

"Relief officer" means a flight crewmember who is scheduled to serve with an augmented flight crew and to accumulate flight time in relief of one or more flight crewmembers.

"Rest period" means a continuous period of time required by this subpart during which a crewmember does not accumulate any duty time. A rest period does not include time spent in deadhead transportation.

§ 135.203 Flight and duty time limitations: all flight crewmembers.

(a) No certificate holder may schedule a flight crewmember, and except as provided in paragraph (c) of this section, no flight crewmember may accumulate flight time in excess of:

(1) Any flight or duty time limitation of this subpart.

(2) 40 hours in any 168 consecutive hours.

(3) 120 hours in any calendar month.

(4) 1,000 hours in any calendar year.

(b) In scheduling a flight crewmember for flight and duty time under this subpart, a certificate holder shall use the time normally necessary for the performance of the flight or duty involved.

(c) A flight crewmember may serve in excess of any flight or duty time limitation of this subpart only if the excess time is due to reasons beyond the control of the certificate holder; however, a flight crewmember may not depart the boarding gate for the purpose of flight of his actual elapsed flight time, plus the flight time scheduled for the next flight, will cause him to exceed the applicable flight or duty time limitation by more than two hours.

§ 135.205 Deadhead transportation:

Deadhead transportation shall be considered duty time unless the deadhead transportation is followed immediately by a rest period. If a rest period is provided, it must be at least eight hours and may be provided concurrently with any other rest period required by this subpart.

§ 135.207 Determination of applicable flight and duty time limitations.

A flight crewmember, who accumulates flight time with more than one flight crew during a duty period, shall be governed by the flight and duty time limitations for the smallest numerical crew complement with which he serves in line operations for the certificate holder.

§ 135.209 Rest requirements.

(a) A certificate holder shall provide each flight crewmember with a rest period of not less than 24 hours at least once during every 168 consecutive hours. This 24 hour rest period may be provided concurrently with any other rest period required by this subpart.

(b) That period of time during which a crewmember, who is otherwise in a rest period, is required by the certificate holder to be available to receive a schedule of duty time may be considered part of a rest period.

(c) The rest period required by §§ 135.211, 135.213, and 135.217 must be at least twice the number of hours of flight time accumulated since the last rest period, but not less than eight hours.

§ 135.211 Flight crew consisting of: one pilot.

(a) This section applies to flight crews consisting of one pilot.

(b) No certificate holder may schedule a flight crewmember, and no flight crewmember may serve, in excess of eight hours of flight time, or 12 hours of duty time, without a rest period.

§ 135.213 Flight crew consisting of: pilot in command and second in command.

(a) This section applies to flight crews consisting of a pilot in command and a second in command.

(b) No certificate holder may schedule a flight crewmember, and no flight crewmember may serve, in excess of 10 hours of flight time, or 12 hours of duty time, without a rest period.

§ 135.215 Augmented flight crews.

(a) The pilot in command, as designated by the certificate holder under § 135.97 of this part, shall remain the pilot in command at all times during that flight.

(b) During operations involving one or more relief officers, either the pilot in command or the second in command, as designated by the certificate holder, shall be at a pilot station at all times.

§ 135.217 Flight crews consisting of: pilot in command, second in command, and relief officers.

(a) This section applies to flight crews consisting of a pilot in command, a second in command, and a relief officer.

(b) No certificate holder may schedule a flight crewmember, and no flight crewmember may serve, in excess of 12 hours of flight time, or 16 hours of duty time, without a rest period.

§ 135.219 [Reserved]

Subpart G—Crewmember Testing Requirements

§ 135.223 Applicability.

This subpart prescribes requirements for the tests and checks required for pilot and flight attendant crewmembers and for the approval of check pilots in operations under this part.

§ 135.225 Initial and recurrent pilot testing requirements.

(a) No certificate holder may use the services of a pilot, nor may any person serve as a pilot, unless, since the beginning of the 12th calendar month before that service, he has passed a written or oral test, given to him by the Administrator or an authorized check pilot, on his knowledge in the following areas:

(1) The appropriate provisions of Parts 61, 91, and 135 of this chapter and the operations specifications and the manual of the certificate holder;

(2) For each type of aircraft to be flown by the pilot, the aircraft powerplant, major components and systems, major appliances, performance and operating limitations, standard and emergency operating procedures, and the contents of the approved aircraft flight manual or owner's handbook, as applicable;

(3) For each type of aircraft to be flown by the pilot, the method of determining compliance with weight and balance limitations for takeoff, landing and en route operations;

(4) Navigation and use of air navigation aids appropriate to the operation or pilot authorization, including, when applicable, instrument approach facilities and procedures;

(5) Air traffic control procedures, including IFR procedures when applicable;

(6) Meteorology in general, including the principles of frontal system, icing, fog, thunderstorms, and windshear, and, if appropriate for the operation of the certificate holder, high altitude weather;

(7) Procedures for avoiding operations in thunderstorms and hail, and for operating in turbulent air or in icing conditions; and

(8) New equipment, procedures, or techniques, as appropriate.

(b) No certificate holder may use the services of a pilot, nor may any person serve as a pilot, in any aircraft unless, since the beginning of the 12th calendar month before that service, he has passed a competency check given to him by the Administrator or an authorized check pilot in that class of aircraft, if single-engine airplane other than turbojet, or that type of aircraft, if helicopter, multiengine, or turbojet, to determine the pilot's competence in practical skills and techniques in that aircraft or class of aircraft. The extent of the competency check shall be determined by the Administrator or authorized check pilot conducting the competency check. The competency check may include any of the maneuvers and procedures currently required for the original issuance of the particular pilot certificate required for the operations authorized and appropriate to the category, class and type of aircraft involved. For the purposes of this paragraph, type as used with respect to an airplane herein, means any one of a group of airplanes determined by the Administrator to have a similar means of propulsion, the same manufacturer, and no significantly different handling or flight characteristics.

(c) The instrument proficiency check required by § 135.229 may be substituted for the competency check required by this section for the type of aircraft used in the check.

(d) For the purpose of this part, competent performance of a procedure or maneuver by a person to be used as a pilot requires that he be the obvious master of the aircraft, with the successful outcome of the maneuver never in doubt.

(e) The Administrator or authorized check pilot certifies the competency of each pilot who passes the knowledge or flight check in the certificate holder's pilot records.

(f) Portions of a required competency check may be given in an aircraft simulator or other appropriate training device, if approved by the Administrator.

§ 135.227 Initial and recurrent flight attendant crewmember testing requirements.

No certificate holder may use the services of a flight attendant crewmember, nor may any person serve as a flight attendant crewmember, unless, since the beginning of the 12th calendar month before that service, the certificate holder has determined by appropriate initial and recurrent testing that the person is knowledgeable and competent in the following areas as appropriate to assigned duties and responsibilities:

(a) Authority of the pilot in comand;

(b) Passenger handling, including procedures to be followed in the event of the presence of deranged persons or other persons whose conduct might jeopardize the safety of other passengers;

(c) Crewmember assignments, functions, and responsibilities during ditching and evacuation of persons who may need the assistance of another person to move expeditiously to an exit in the event of an emergency;

(d) Briefing of passengers;

(e) Location and operation of portable fire extinguishers;

(f) Proper use of cabin equipment and controls;

(g) Location and operation of passenger oxygen equipment;

(h) Location and operation of all normal and emergency exits, including evacuation chutes and escape ropes; and

(i) Seating of persons who may need assistance of another person to move rapidly to an exit in the event of an emergency as prescribed by the certificate holder's operations manual.

§ 135.229 Pilot in command: instrument proficiency check requirements.

(a) No certificate holder may use a pilot, nor may any person serve as a pilot in command of an aircraft under IFR unless, since the beginning of the sixth calendar month before that use, he has passed an instrument proficiency check and the Administrator or an authorized check pilot has so certified in a letter of competency.

(b) No pilot may use any type of instrument approach procedure under IFR unless, since the beginning of the sixth calendar month before that use he has successfully demonstrated that procedure and the Administrator or an authorized check pilot has so certified in a letter of competency.

(c) The instrument proficiency check required by paragraph (a) of this section consists of an oral or written equipment test and a flight check under simulated or actual IFR conditions. The equipment test includes questions on emergency procedures, engine operation, fuel and lubrication system, power settings, stall speeds, best engine-out speed, propeller and supercharger operations, and hydraulic, mechanical, and electrical systems, as appropriate. The instrument proficiency check includes navigation by instruments, recovery from simulated emergencies, and standard instrument approaches involving navigational facilities that he is to be authorized to use. Each person taking the instrument proficiency check must show that standard of competence required by paragraph (d) of § 135.225. The instrument proficiency check must include at least:

(1) The procedures and maneuvers set forth for an airline transport pilot certificate in the particular type of airplane, if appropriate, in the case of a pilot in command of an airplane under § 135.193(a), on the procedures and maneuvers set forth for a commercial pilot certificate and an instrument rating and, if required, for the appropriate type rating for all other pilots. In the case of an ATCO certificate holder whose operations specifications limit its operations to VFR only, the instrument portion of the proficiency check is not required.

(2) It must be given by an authorized check airman or by the Administrator.

(d) If the pilot in command is assigned to pilot only one type of aircraft, he must take the instrument proficiency check required by paragraph (a) of this section in that type of aircraft.

(e) If the pilot in command is assigned to pilot more than one type of aircraft, he must take the instrument proficiency check required by paragraph (a) of this section in each type of aircraft to which he is assigned, in rotation, but not more than one flight check during each period described in paragraph (a) of this section.

(f) If the pilot in command is assigned to pilot both single-engine and multiengine aircraft, he must take the instrument proficiency checks required by paragraph (a) of this section alternately in multiengine and single-engine aircraft, but not more than one flight check during each period described in paragraph (a) of this section. Portions of a required flight check may be given

in an aircraft simulator or other appropriate training device, if approved by the Administrator.

(g) If the pilot in command is authorized to use an autopilot system in place of a second in command, he must show, during the required instrument check, that he is able (without a second in command) both with and without using the autopilot to:

(1) Conduct instrument operations competently; and

(2) Properly conduct air-ground communications and comply with complex air traffic control instructions.

(3) Each person taking the autopilot check must show that, while using the autopilot, the airplane can be operated as proficiently as it would be if a second in command were present to handle air-ground communications and copy air traffic control instructions. The autopilot check need only be demonstrated once every 12 calendar months during the instrument check required under paragraph (a) of this section.

(h) The Administrator or authorized check pilot issues a letter of competency to each pilot who passes the instrument proficiency check. The letter of competency contains a list of the type of instrument approach procedures authorized and, if the pilot passes the autopilot check, an authorization to use an autopilot system in place of a second in command.

§ 135.231 Pilot in command: line checks: routes and airways.

(a) No certificate holder may use a pilot, nor may any person serve, as a pilot in command of a flight under VFR unless, since the beginning of the 12th calendar month before that service he has passed a flight check in one of the types of aircraft that he is to fly, given by an approved check pilot who is qualified in the aircraft, or by the Administrator, consisting of at least one flight over one route segment and including takeoffs and landings at one or more representative airports.

(b) No certificate holder may use a pilot, nor may any person serve, as pilot in command of a flight under IFR unless, since the beginning of the 12th calendar month before that service he has passed a flight check in one of the types of airplanes that he is to fly, given by an approved check pilot who is qualified in the aircraft, or by the Administrator, consisting of at least one flight over a federal airway or approved off-airway route, or portion thereof, including takeoffs and landings at two or more representative airports.

(c) The person who conducts the check shall determine whether the pilot being checked satisfactorily performs the duties and responsibilities of a pilot in command in operations under this Part, and shall so certify in the pilot training record.

(d) Each certificate holder shall establish in the manual required by § 135.23 a procedure whereby each pilot who has not flown over a route and into an airport within the preceding 90 days will, before beginning the flight, familiarize himself with all available information concerning that flight. This information must include the subjects listed in paragraph (d) of this section in regard to the routes to be flown and airports into which he is to operate.

(e) Each qualifying pilot shall show that he has adequate knowledge of the following:

(1) Weather characteristics appropriate to the seasons.

(2) Navigation facilities.

(3) Communication procedures.

(4) Kinds of terrain and obstruction hazards.

(5) Minimum safe flight levels.

(6) Pertinent air traffic control procedures including terminal area, arrival, departure, holding, and instrument approach procedures.

(7) Congested areas, obstructions, and physical layout of each area in the terminal area in which the pilot will operate.

§ 135.233 Crewmember: tests and checks, grace provisions; training to accepted standards.

(a) If a crewmember who is required to take a test or a flight check under this part, completes the test or flight check in the calendar month before or after the calendar month in which it is required, he is considered to have completed the test or check in the calendar month in which it is required.

(b) If a pilot being checked under this part fails any of the required maneuvers, the person giving the check may give additional training to the pilot during the course of the check. In addition to repeating the maneuvers failed, the person giving the check may require the pilot being checked to repeat any other maneuvers he finds are necessary to determine the pilot's proficiency. If the pilot being checked is unable to demonstrate satisfactory performance to the person conducting the check, the certificate holder may not use him nor may he serve in operations under this part until he has satisfactorily completed the check.

§ 135.235 Check pilot authorization: application and issue.

Each certificate holder desiring FAA approval of a check pilot shall submit his request in writing to the FAA District Office having jurisdiction over the area in which the holder's principal business office is located. The Administrator may issue a letter of authority to each check pilot if he passes the appropriate oral and flight test. The letter of authority lists the tests and checks in this part that the check pilot is qualified to give, and the category, class and type aircraft, where appropriate, for which the check pilot is qualified.

Subpart H—Training

§ 135.237 Applicability and terms used.

(a) This subpart prescribes requirements applicable for establishing and maintaining an approved training program for crewmembers, check-airmen and instructors, and other operations personnel, and for the approval and use of aircraft simulators and other training devices in the conduct of that program.

(b) For the purpose of this subpart, aircraft groups are as follows:

(1) Group I. Propeller driven, including: (i) reciprocating powered; and

(ii) Turbopropeller powered.

(2) Group II. Turbojet powered.

(c) For the purposes of ths subpart, the following terms and definitions apply:

(1) Initial training. The training required for crewmembers who have not qualified and served in the same capacity on another aircraft of the same group.

(2) Transition training. The training required for crewmembers who have qualified and served in the same capacity on another aircraft of the same group.

(3) Upgrade training. The training required for crewmembers who have qualified and served as second in command on a particular aircraft type, before they serve as pilot in command on that aircraft.

(4) Differences Training. The training required for crewmembers who have qualified and served on a particular type aircraft, when the Administrator finds differences training is necessary before a crewmember serves in the same capacity on a particular variation of that aircraft.

(5) Recurrent training. The training required for crewmembers to remain adequately trained and currently proficient with respect to each aircraft, crewmember position, and type of operation in which he serves.

(6) Inflight. Refers to maneuvers, procedures, or functions that must be conducted in the aircraft.

§ 135.239 Training program: general.

(a) Each certificate holder required to have a training program under § 135.257 of this Part shall:

(1) Establish, obtain the appropriate initial and final approval of, and provide a training program that meets the requirements of this subpart and that ensures that each crewmember, flight instructor, check airman, and each person assigned duties for the carriage and handling of hazardous materials, (as defined in 49 CFR 171.8) is adequately trained to perform his assigned duties.

(2) Provide adequate ground and flight training facilities and properly qualified ground instructors for the training required by this subpart,

(3) Provide and keep current with respect to each aircraft type used and if applicable, the particular variations within the aircraft type, appropriate training material, examinations, forms, instructions, and procedures for use in conducting the training and checks required by this subpart; and

(4) Provide enough flight instructors, check airmen, and simulator instructors to conduct required flight training and flight checks, and simulator training courses permitted under this subpart.

(b) Whenever a crewmember who is required to take recurrent training completes the training in the calendar month before, or the calendar month after the month in which that training is required, he is considered to have completed it in the calendar month in which it was required.

(c) Each instructor, supervisor, or check airman who is responsible for a particular ground training subject, segment of flight training, course of training, flight check, or competence check under this part shall certify as to the proficiency and knowledge of the crewmember, flight instructor, or check airman concerned upon completion of that training or check. That certification shall be made a part of the crewmember's record.

(d) Training subjects that are applicable to more than one aircraft or crewmember position and that have been satisfactorily completed in connection with prior training while employed by the certificate holder for another aircraft or another crewmember position, need not be repeated during subsequent training other than recurrent training.

(e) Aircraft simulators and other training devices may be utilized in the certificate holder's training program if approved by the Administrator.

§ 135.241 Training program and revision: initial and final approval.

(a) To obtain initial and final approval of a training program, or a revision to an approved training program, each certificate holder must submit to the Administrator:

(1) An outline of the proposed or revised curriculum, that provides enough information for a preliminary evaluation of the proposed training program or revision; and

(2) Additional relevant information as may be requested by the Administrator.

(b) If the proposed training program or revision complies with this subpart, the Administrator grants initial approval in writing after which the certificate holder may conduct the training in accordance with that program. The Administrator then evaluates the effectiveness of the training program and advises the certificate holder of deficiencies, if any, that must be corrected.

(c) The Administrator grants final approval of the proposed training program or revision if the certificate holder shows that the training conducted under the initial approval set forth in paragraph (b) of this section ensures that each person who successfully completes the training is adequately trained to perform his assigned duties.

(d) Whenever the Administrator finds that revisions are necessary for the continued adequacy of a training program that has been granted final approval, the certificate holder shall, after notification by the Administrator, make any changes in the program that are found necessary by the Administrator. Within 30 days after the certificate holder receives such notice, it may file a petition to reconsider the notice with the FAA District Office charged with the overall inspection of the certificate holder's operations. The filing of a petition to reconsider stays the notice pending a decision by the Administrator. However, if the Administrator finds that there is an emergency that requires immediate action in the interest of safety he may, upon a statement of the reasons, require a change effective without stay.

§ 135.243 Training program: curriculum.

(a) Each certificate holder must prepare and keep current a written training program curriculum for each type of aircraft with respect to each crewmember required for that type aircraft. The curriculum must include ground and flight training required by this subpart.

(b) Each training program curriculum must include the following: (1) A list of principal ground training subjects, including emergency training subjects, that are provided.

(2) A list of all the training devices, mockups, systems trainers, procedures trainers, or other training aids that the certificate holder will use.

(3) Detailed descriptions or pictorial displays of the approved normal, abnormal, and emergency maneuvers, procedures and functions that will be performed during each flight training phase or flight check, indicating those maneuvers, procedures and functions that are to be performed during the inflight portions of flight training and flight checks.

§ 135.245 Crewmember training requirements.

(a) Each certificate holder must include in its training program the following initial and transition ground training as appropriate to the particular assignment of the crewmember: (1) Basic indoctrination ground training for newly hired crewmembers including instruction in at least the:

(i) Duties and responsibilities of crewmembers as applicable;

(ii) Appropriate provisions of the Federal Aviation Regulations;

(iii) Contents of the certificate holder's operating certificate and operations specifications (not required for flight attendants); and

(iv) Appropriate portions of the certificate holder's operating manual.

(2) The initial and transition ground training specified in §§ 135.261 and 135.265, as applicable.

(3) Emergency training as specified in § 135.247.

(b) Each training program must provide the initial and transition flight training specified in § 135.263, as applicable.

(c) Each training program must provide recurrent ground and flight training as provided in § 135.267.

(d) Upgrade training as specified in §§ 135.261 and 135.263 for a particular type aircraft may be included in the training program for crewmembers who have qualified and served as second in command on that aircraft.

(e) In addition to initial, transition, upgrade and recurrent training, each training program must also provide ground and flight training, instruction, and practice as necessary to ensure that each crewmember:

(1) Remains adequately trained and currently proficient with respect to each aircraft, crewmember position, and type of operation in which he serves; and

(2) Qualifies in new equipment, facilities, procedures, and techniques, including modifications to aircraft.

§ 135.247 Crewmember emergency training.

(a) Each training program must provide the emergency training set forth in this section with respect to each aircraft type, model, and configuration, each crewmember, and each kind of operation conducted, insofar as appropriate for each crewmember and the certificate holder.

(b) Emergency training must provide the following: (1) Instruction in emergency assignments and procedures, including coordination among crewmembers.

(2) Individual instruction in the location, function, and operation of emergency equipment including:

(i) Equipment used in ditching and evacuation;

(ii) First aid equipment and its proper use; and

(iii) Portable fire extinguishers, with emphasis on the type of extinguisher to be used on different classes of fires.

(3) Instruction in the handling of emergency situations including:

(i) Rapid decompression;

(ii) Fire in flight or on the surface and smoke control procedures with emphasis on electrical equipment and related circuit breakers found in cabin areas;

(iii) Ditching and evacuation;

(iv) Illness, injury, or other abnormal situations involving passengers or crewmembers; and

(v) Hijacking and other unusual situations.

(4) Review of previous aircraft accidents and incidents pertaining to actual emergency situations.

(c) Each crewmember must perform at least the following emergency drills, utilizing the proper emergency equipment and procedures, unless the Administrator finds that, with respect to a particular drill, the crewmember can be adequately trained by demonstration:

(1) Ditching, if applicable.

(2) Emergency evacuation.

(3) Fire extinguishing and smoke control.

(4) Operation and use of emergency exits, including deployment and use of evacuation chutes.

(5) Use of crew and passenger oxygen.

(6) Removal of life rafts from the aircraft, inflation of the life rafts, use of life lines, and boarding of passengers and crew.

(7) Donning and inflation of life vests and the use of other individual flotation devices.

(d) Crewmembers who serve in operations above 25,000 feet must receive instruction in the following:

(1) Respiration.

(2) Hypoxia.

(3) Duration of consciousness without supplemental oxygen at altitude.

(4) Gas expansion.

(5) Gas bubble formation.

(6) Physical phenomena and incidents of decompression.

§ 135.249 Training requirements: handling and carriage of hazardous materials.

(a) No certificate holder may use any person to perform, and no person may perform, any assigned duties and responsibilities for the handling or carriage of hazardous materials, (as defined in 49 CFR 171.8) unless within the preceding 12 calendar months that person has satisfactorily completed initial or recurrent training in an appropriate training program established by the certificate holder, which includes instruction regarding the proper shipper certification, packaging, marking, labeling, and documentation for hazardous materials, and includes instruction regarding their compatibility, loading, storage, and handling characteristics.

(b) Each certificate holder shall maintain a record of the satisfactory completion of the initial and recurrent training given to crewmembers and ground personnel who perform assigned duties and responsibilities for the handling and carriage of hazardous materials.

(c) Each certificate holder that elects not to accept hazardous materials shall ensure that each crewmember is adequately trained to recognize those items classified as hazardous materials.

(d) Notwithstanding the provisions of paragraph (a) of this section, when operating into or out of airports at which employees or contract personnel are not available, a certificate holder may use persons not meeting the requirements of paragraph (a) and (b) of this section to load, offload, or otherwise handle hazardous materials provided these persons are supervised by a crewmember who is qualified under paragraphs (a) and (b) of this section.

(e) Whenever any person subject to the recurrent training requirements of paragraph (a) of this section completes the training in the calendar month before or the calendar month after the month in which that training is required, he is considered to have completed it in the calendar month in which it was required.

§ 135.251 Approval of aircraft simulators and other training devices.

(a) Training courses using aircraft simulators and other training devices may be included in the certificate holder's training program if approved by the Administrator.

(b) Each aircraft simulator and other training device that is used in a training course or in checks required under this subpart must meet the following requirements: (1) It must be specifically approved for:

(i) The certificate holder;

(ii) The type aircraft and, if applicable the particular variation within type, for which the training or check is being conducted; and

(iii) The particular maneuver, procedure, or crewmember function involved.

(2) It must maintain the performance, functional, and other characteristics that are required for approval.

(3) It must be modified to conform with any modification to the aircraft being simulated that results in changes in performance, functional, or other characteristics required for approval.

§ 135.253 Training program: check airmen and instructor qualifications.

(a) No certificate holder may use a person nor may any person serve as a flight instructor or check airman in a training program established under this subpart unless, with respect to the particular aircraft type involved, that person:

(1) Holds the airman certificate ratings that must be held in order to serve as a pilot in command in operations under this subpart;

(2) Has satisfactorily completed the appropriate training phases for the aircraft, including recurrent training, that are required in order to serve as a pilot in command in operations under this subpart;

(3) Has satisfactorily completed the appropriate proficiency or competency checks that are required in order to serve as a pilot in command in operations under this subpart;

(4) Has satisfactorily completed the applicable training requirements of § 135.255;

(5) Holds a Class I or Class II medical certificate as required in order to serve as a pilot in command in operations under this subpart; and

(6) In the case of a check airman, has been approved by the Administrator for the airman duties involved.

(b) No certificate holder may use a person nor may any person serve as a simulator instructor for a course of training given in an aircraft simulator as provided by this subpart unless that person:

(1) Holds at least a commercial pilot certificate; and

(2) Has satisfactorily completed for a check airman:

(i) Appropriate initial pilot ground training and ground training for a flight instructor as provided in this subpart; and

(ii) A simulator flight training course in the type simulator in which that person instructs as provided by this subpart.

§ 135.255 Check airmen and flight instructors: initial and transition training.

(a) The initial and transition ground training for pilot check airmen must include the following:

(1) Pilot check airman duties, functions, and responsibilities.

(2) The applicable Federal Aviation Regulations and certificate holder's policies and procedures.

(3) The appropriate methods, procedures, and techniques for conducting the required checks.

(4) Proper evaluation of pilot performance including the detection of:

(i) Improper and insufficient training; and

(ii) Personal characteristics that could adversely affect safety.

(5) The appropriate corrective action in the case of unsatisfactory checks.

(6) The approved methods, procedures, and limitations for performing the required normal, abnormal, and emergency procedures in the aircraft.

(b) The initial and transition ground training for pilot flight instructors, except for the holder of a valid flight instructor certificate, must include the following:

(1) The fundamental principles of the teaching-learning process.

(2) Teaching methods and procedures.

(3) The instructor-student relationship.

(c) The initial and transition flight training for pilot check airmen and pilot flight instructors must include the following:

(1) Enough inflight training and practice in conducting flight checks from the left and right pilot seats in the required normal, abnormal, and emergency maneuvers to ensure his competence to conduct the pilot flight checks and flight training required by this Part.

(2) The appropriate safety measures to be taken from either pilot seat for emergency situations that are likely to develop in training.

(3) The potential results of improper or untimely safety measures during training.

The requirements of paragraphs (2) and (3) may be accomplished inflight or in an approved simulator.

§ 135.257 Pilot and flight attendant crewmember training programs.

(a) Each certificate holder, other than one who uses only himself as a pilot, shall establish and maintain an approved pilot training program, and each certificate holder who uses a flight attendant crewmember shall establish and maintain an approved flight attendant training program, that is appropriate to the operations to which each pilot and flight attendant is to be assigned, and will ensure that he is adequately trained to meet the applicable knowledge and practical testing requirements of this Part in accordance with §§ 135.225 through 135.233. However, the Administrator may authorize a deviation from the requirements of this section if he finds that, because of the limited size and scope of the operation, safety will allow a deviation from these requirements.

(b) Each certificate holder required to have a training program by paragraph (a) of this section shall include in that program ground and flight training cur-

riculums for—(1) Initial training; (2) Transition training; (3) Upgrade training; (4) Differences training; and (5) Recurrent training every 12 calendar months.

(c) Each certificate holder required to have a training program by paragraph (a) of this section shall provide current and appropriate study materials for use by each required pilot and flight attendant.

(d) The certificate holder shall furnish copies of the pilot and flight attendant crew-member training program, and all changes and additions thereto, to the representative of the Administrator assigned to it. If the certificate holder uses training facilities of other persons, a copy of those training programs or appropriate portions used for those facilities shall also be furnished. Curricula that follow FAA published curricula may be cited by reference in the copy of the training program furnished to the representative of the Administrator and need not be furnished with the program.

§ 135.259 Crewmember initial and recurrent training requirements.

No certificate holder may use the services of, nor may any person serve as a crewmember in operations under this part unless that crewmember has completed the appropriate initial or recurrent training phase of the training program appropriate to the type of operation in which he is to serve since the beginning of the 12th calendar month before that service

§ 135.261 Pilots: initial, transition, and upgrade ground training.

(a) Initial, transition, and upgrade ground training for pilots must include instruction in at least the following, as applicable to their duties:

(1) General subjects—(i) The certificate holder's flight locating procedures;

(ii) Principles and methods for determining weight and balance, and runway limitations for takeoff and landing;

(iii) Enough meterology to ensure a practical knowledge of weather phenomena, including the principles of frontal systems, icing, fog, thunderstorms, windshear and, if appropriate, high altitude weather situations;

(iv) Air traffic control systems, procedures, and phraseology;

(v) Navigation and the use of navigation aids, including instrument approach procedures;

(vi) Normal and emergency communication procedures;

(vii) Visual cues prior to and during descent below DH or MDA; and

(viii) Other instructions as necessary to ensure his competence.

(2) For each aircraft type—(i) A general description;

(ii) Performance characteristics;

(iii) Engines and propellers;

(iv) Major components;

(v) Major aircraft systems (i.e., flight controls, electrical, and hydraulic); other systems, as appropriate; principles of normal, abnormal, and emergency operations; appropriate procedures and limitations;

(vi) Procedures for avoiding severe weather situations and for operating in or near thunderstorms (including best penetrating altitudes), turbulent air (including clear air turbulence and low altitude wind shear), icing, hail, and other potentially hazardous meterological conditions;

(vii) Operating limitations;

(viii) Fuel consumption and cruise control;

(ix) Flight planning;

(x) Each normal and emergency procedure; and

(xi) The approved Aircraft Flight Manual.

§ 135.263 Pilots: initial, transition, upgrade, and differences flight training.

(a) Initial, transition, upgrade, and differences training for pilots must include flight and practice in each of the maneuvers and procedures set forth in the approved training program curriculum.

(b) The maneuvers and procedures required by paragraph (a) of this section must be performed inflight, except to the extent that certain maneuvers and procedures may be performed in an airplane simulator, an appropriate training device, or a static aircraft as permitted by this subpart.

(c) If the certificate holder's approved training program includes a course of training utilizing an aircraft simulator or other training device, each pilot must successfully complete—

(1) Training and practice in the simulator or training device in at least the maneuvers and procedures set forth in this subpart that are capable of being performed in the aircraft simulator or training device; and

(2) A flight check in the aircraft or the simulator or training device to the level of proficiency of a pilot in command or second in command, as applicable, in at least the maneuvers and procedures that are capable of being performed in an aircraft simulator or training device.

§ 135.265 Flight attendants: initial and transition ground training.

(a) Initial and transition ground training for flight attendants must include instruction in at least the following:

(1) General subjects—(i) The authority of the pilot in command; and

(ii) Passenger handling, including the procedures to be followed in the case of deranged persons or other persons whose conduct might jeopardize safety.

(2) For each aircraft type—(i) A general description of the aircraft emphasizing physical characteristics that may have a bearing on ditching, evacuation, and inflight emergency procedures and on other related duties;

(ii) The use of both the public address system and the means of communicating with other flight crewmembers, including emergency means in the case of attempted hijacking or other unusual situations; and

(iii) Proper use of electrical galley equipment and the controls for cabin heat and ventilation.

(b) Initial and transition ground training for flight attendants must include a competence check to determine ability to perform assigned duties and responsibilities.

§ 135.267 Recurrent training.

(a) Each certificate holder must ensure that each crewmember receives recurrent training and is adequately trained and currently proficient with respect to the type aircraft and crewmember position involved.

(b) Recurrent ground training for crewmembers must include at least the following:

(1) A quiz or other review to determine the crewmember's knowledge with respect to the aircraft and crewmember position involved.

(2) Instruction as necessary in the subjects required for initial ground training by this subpart, as appropriate, including emergency training.

(3) For flight attendants, a competence check as required by § 135.265(b).

(c) Recurrent fight training for pilots must include, at least, flight training in the maneuvers or procedures set forth in this subpart, except that satisfactory completion of the check required by § 135.225 within the preceding 12 calendar months may be substituted for recurrent flight training.

Subpart I—Airplane Performance

§ 135.271 Applicability.

(a) This subpart prescribes airplane performance operating limitations applicable to the operation of the categories of airplanes listed in § 135.273 when operated in accordance with the rules of this part.

(b) For the purpose of this Part, "effective length of the runway," for takeoff means the distance from the end of the runway at which the takeoff is started to the point at which the obstruction clearance plane associated with the other end of the runway intersects the runway centerline. For landing, it means the distance from the point at which the obstruction clearance plane associated with the approach end of the runway intersects the centerline of the runway to the far end thereof.

(c) For the purpose of this subpart, "obstruction clearance plane" means a plane sloping upward from the runway at a slope of 1:20 to the horizontal, and tangent to or clearing all obstructions within a specified area surrounding the runway as shown in a profile view of that area. In the plan view, the centerline of the specified area coincides with the centerline of the runway, beginning at the point where the obstruction clearance plane intersects the centerline of the runway and proceeding to a point at least 1,500 feet from the beginning point. Thereafter the centerline coincides with the takeoff path over the ground for the runway (in the case of takeoffs) or with the instrument approach counterpart (for landings), or, where the applicable

one of these paths has not been established, it proceeds consistent with turns of at least 4,000-foot radius until a point is reached beyond which the obstruction clearance plane clears all obstructions. This area extends laterally 200 feet on each side of the centerline at the point where the obstruction clearance plane intersects the runway and continues at this width to the end of the runway; then it increases uniformly to 500 feet on each side of the centerline at a point 1,500 feet from the intersection of the obstruction clearance plane with the runway; thereafter it extends laterally 500 feet on each side of the centerline.

§ 135.273 General.

(a) Each certificate holder operating a reciprocating engine powered large transport category airplane shall comply with §§ 135.275 through 135.287.

(b) Each certificate holder operating a turbine engine powered large transport category airplane shall comply with applicable provisions of § 135.289 through 135.297, except that when it operates a turbopropeller powered large transport category airplane certificated after August 29, 1959, but previously type certificated with the same number of reciprocating engines, it may comply with §§ 135.275 through 135.287.

(c) Each certificate holder operating a large nontransport category airplane shall comply with §§ 135.299 through 135.305 and any determination of compliance must be based only on approved performance data.

(d) The performance data in the Airplane Flight Manual applies in determining compliance with §§ 135.275 through 135.297. Where conditions are different from those on which the performance data is based, compliance is determined by interpolation or by computing the effects of change in the specific variables, if the results of the interpolation or computations are substantially as accurate as the results of direct tests.

(e) No person may take off a reciprocating engine powered large transport category airplane at a weight that is more than the allowable weight for the runway being used (determined under the runway takeoff limitations of the transport category operating rules of this part) after taking into account the temperature operating correction factors in Section 4a. 749a–T or 4b. 117 of the Civil Air Regulations as in effect on January 31, 1965, and set forth in the applicable Airplane Flight Manual.

(f) The Administrator may authorize in the operations specifications deviations from the requirements in this subpart if special circumstances make a literal observance of a requirement unnecessary for safety.

(g) The ten-mile width specified in §§ 135.279 through 135.283 may be reduced to five miles, for not more than 20 miles, when operating VFR or where navigation facilities furnish reliable and accurate identification of high ground and obstructions located outside of five miles, but within ten miles, on each side of the intended track.

§ 135.275 Large transport category airplanes: reciprocating engine powered: weight limitations.

(a) No person may take off a reciprocating engine powered large transport category airplane from an airport located at an elevation outside of the range for which maximum takeoff weights have been determined for that airplane.

(b) No person may take off a reciprocating engine powered large transport category airplane for an airport of intended destination that is located at an elevation outside of the range for which maximum landing weights have been determined for that airplane.

(c) No person may specify, or have specified, an alternate airport that is located at an elevation outside of the range for which maximum landing weights have been determined for the reciprocating engine powered large transport category airplane concerned.

(d) No person may take off a reciprocating engine powered large transport category airplane at a weight more than the maximum authorized takeoff weight for the elevation of the airport.

(e) No person may take off a reciprocating engine powered large transport category airplane if its weight on arrival at the airport of destination will be more than the maximum authorized landing weight for the elevation of that airport, allowing for normal consumption of fuel and oil en route.

§ 135.277 Large transport category airplanes: reciprocating engine powered: takeoff limitations.

(a) No person operating a reciprocating engine powered large transport category airplane may take off that airplane unless it is possible:

(1) To stop the airplane safely on the runway, as shown by the accelerate stop distance data, at any time during takeoff until reaching critical-engine failure speed;

(2) If the critical engine fails at any time after the airplane reaches critical-engine failure speed V1, to continue the takeoff and reach a height of 50 feet, as indicated by the takeoff path data, before passing over the end of the runway; and

(3) To clear all obstacles either by at least 50 feet vertically (as shown by the takeoff path data) or 200 feet horizontally within the airport boundaries and 300 feet horizontally beyond the boundaries, without banking before reaching a height of 50 feet (as shown by the takeoff path data) and thereafter without banking more than 15 degrees.

(b) In applying this section, corrections must be made for any runway gradient. To allow for wind effect, takeoff data based on still air may be corrected by taking into account not more than 50 percent of any reported headwind component and not less than 150 percent of any reported tailwind component.

§ 135.279 Large transport category airplanes: reciprocating engine powered: en route limitations: all engines operating.

(a) No person operating a reciprocating engine powered large transport category airplane may take off that airplane at a weight, allowing for normal consumption of fuel and oil, that does not allow a rate of climb (in feet per minute), with all engines operating, of at least 6.90 Vso (that is, the number of feet per minute is obtained by multiplying the number of knots by 6.90) at an altitude of at least 1,000 feet above the highest ground or obstruction within ten miles of each side of the intended track.

(b) This section does not apply to large transport category airplanes certificated under Part 4a of the Civil Air Regulations.

§ 135.281 Large transport category airplanes: reciprocating engine powered: en route limitations: one engine inoperative.

(a) Except as provided in paragraph (b) of this section, no person operating a reciprocating engine powered large transport category airplane may take off that airplane at a weight, allowing for normal consumption of fuel and oil, that does not allow a rate of climb (in feet per minute), with one engine inoperative, of at least $0.079-\frac{0.106}{N}Vso^2$ (where N is the number of engines installed and Vso is expressed in knots) at an altitude of at least 1,000 feet above the highest ground or obstruction within 10 miles of each side of the intended track. However, for the purposes of this paragraph the rate of climb for transport category airplanes certificated under Part 4a of the Civil Air Regulations is $0.026\ Vso^2$.

(b) In place of the requirements of paragraph (a) of this section, a person may, under an approved procedure, operate a reciprocating engine powered large transport category airplane at an all-engines-operating altitude that allows the airplane to continue, after an engine failure, to an alternate airport where a landing can be made in accordance with Section 135.267, allowing for normal consumption of fuel and oil. After the assumed failure, the flight path must clear the ground and any obstruction within five miles on each side of the intended track by at least 2,000 feet.

(c) If an approved procedure under paragraph (b) of this section is used, the certificate holder shall comply with the following:

(1) The rate of climb (as prescribed in the Airplane Flight Manual for the appropriate weight and altitude) used in calculating the airplane's flight path shall be diminished by an amount, in feet per minute, equal to $0.079-\frac{0.106Vso^3}{N}$ (when N is the number of engines installed and Vso^3 is expressed in knots) for airplanes certificated under Part 25 of this chapter and by $0.026\ Vso^2$

for airplanes certificated under Part 4a of the Civil Air Regulations.

(2) The all-engine-operating altitude shall be sufficient so that in the event the critical engine becomes inoperative at any point along the route, the flight will be able to proceed to a predetermined alternate airport by use of this procedure. In determining the takeoff weight, the airplane is assumed to pass over the critical obstruction following engine failure at a point no closer to the critical obstruction than the nearest approved radio navigational fix, unless the Administrator approves a procedure established on a different basis upon finding that adequate operational safeguards exist.

(3) The airplane must meet the provisions of paragraph (a) of this section at 1,000 feet above the airport used as an alternate in this procedure.

(4) The procedure must include an approved method of accounting for winds and temperatures that would otherwise adversely affect the flight path.

(5) In complying with this procedure, fuel jettisoning is allowed if the certificate holder shows that it has an adequate training program, that proper instructions are given to the flight crew, and all other precautions are taken to ensure a safe procedure.

(6) The certificate holder and the pilot in command shall jointly elect an alternate airport for which the appropriate weather reports or forecasts, or any combination thereof, indicate that weather conditions will be at or above the alternate weather minimum specified in the certificate holder's operations specifications for that airport when the flight arrives.

§ 135.283 Part 25 transport category airplanes with four or more engines: reciprocating engine powered: en route limitations: two engines inoperative.

(a) No person may operate an airplane certificated under Part 25 and having four or more engines unless:

(1) There is no place along the intended track that is more than 90 minutes (with all engines operating at cruising power) from an airport that meets the requirements of § 135.287; or

(2) It is operated at a weight allowing the airplane, with the two critical engines inoperative, to climb at 0.013 Vso^2 feet per minute (that is, the number of feet per minute is obtained by multiplying the number of knots squared by 0.013) at an altitude of 1,000 feet above the highest ground or obstruction within 10 miles on each side of the intended track, or at an altitude of 5,000 feet, whichever is higher.

(b) For the purposes of paragraph (a) (2) of this section, it is assumed that:

(1) The two engines fail at the point that is most critical with respect to the takeoff weight;

(2) Consumption of fuel and oil is normal with all engines operating up to the point where the two engines fail with two engines operating beyond that point;

(3) Where the engines are assumed to fail at an altitude above the prescribed minimum altitude, compliance with the prescribed rate of climb at the prescribed minimum altitude need not be shown during the descent from the cruising altitude to the prescribed minimum altitude, if those requirements can be met once the prescribed minimum altitude is reached, and assuming descent to be along a net flight path and the rate of descent to be 0.013 Vso^2 greater than the rate in the approved performance data; and

(4) If fuel jettisoning is provided, the airplane's weight at the point where the two engines fail is considered to be not less than that which would include enough fuel to proceed to an airport meeting the requirements of § 135.287 and to arrive at an altitude of at least 1,000 feet directly over that airport.

§ 135.285 Large transport category airplanes: reciprocating engine powered: landing limitations: destination airport.

(a) Except as provided in paragraph (b) of this section, no person operating a reciprocating engine powered large transport category airplane may take off that airplane, unless its weight on arrival, allowing for normal consumption of fuel and oil in flight, would allow a full stop landing at the intended destination within 60 percent of the effective length of each runway described below from a point 50 feet directly above the intersection of the obstruction clearance plane and the runway. For the purposes of determining the allowable landing weight at the destination airport the following is assumed:

(1) The airplane is landed on the most favorable runway and in the most favorable direction in still air.

(2) The airplane is landed on the most suitable runway considering the probable wind velocity and direction (forecast for the expected time of arrival), the ground handling characteristics of the type of airplane, and other conditions such as landing aids and terrain, and allowing for the effect of the landing path and roll of not more than 50 percent of the headwind component or not less than 150 percent of the tailwind component.

(b) An airplane that would be prohibited from being taken off because it could not meet the requirements of paragraph (a) (2) of this section may be taken off if an alternate airport is selected that meets all of the requirements of this section except that the airplane can accomplish a full stop landing within 70 percent of the effective length of the runway.

§ 135.287 Large transport category airplanes: reciprocating engine powered: landing limitations: alternate airport.

No person may list an airport as an alternate airport in a flight plan unless the airplane (at the weight anticipated at the time of arrival at the airport), based on the assumptions in § 135.285, can be brought to a full stop landing, within 70 percent of the effective length of the runway.

§ 135.289 Large transport category airplanes: turbine engine powered: takeoff limitations.

(a) No person operating a turbine engine powered large transport category airplane may take off that airplane at a weight greater than that listed in the Airplane Flight Manual for the elevation of the airport and for the ambient temperature existing at takeoff.

(b) No person operating a turbine engine powered large transport category airplane certificated after August 26, 1957, but before August 30, 1959 (SR422, 422A), may take off that airplane at a weight greater than that listed in the Airplane Flight Manual for the minimum distance required for takeoff. In the case of an airplane certificated after September 30, 1958 (SR422A, 422B), the takeoff distance may include a clearway distance but the clearway distance included may not be greater than one-half of the takeoff run.

(c) No person operating a turbine engine powered large transport category airplane certificated after August 29, 1959 (SR422B), may take off that airplane at a weight greater than that listed in the Airplane Flight Manual at which compliance with the following may be shown:

(1) The accelerate-stop distance must not exceed the length of the runway plus the length of any stopway.

(2) The takeoff distance must not exceed the length of the runway plus the length of any clearway except that the length of any clearway included must not be greater than one-half the length of the runway.

(3) The takeoff run must not be greater than the length of the runway.

(d) No person operating a turbine engine powered large transport category airplane may take off that airplane at a weight greater than that listed in the Airplane Flight Manual:

(1) In the case of an airplane certificated after August 26, 1957, but before October 1, 1958 (SR422), that allows a takeoff path that clears all obstacles either by at least (35+0.01 D) feet vertically (D is the distance along the intended flight path from the end of the runway in feet), or by at least 200 feet horizontally within the airport boundaries and by at least 300 feet horizontally after passing the boundaries; or

(2) In the case of an airplane certificated after September 30, 1958 (SR422A, 422b), that allows a net takeoff flight path that clears all obstacles either by a height of at least 35 feet vertically, or by at least 200 feet horizontally within the airport boundaries and by at least 300 feet horizontally after passing the boundaries.

(e) In determining maximum weights, minimum distances and flight paths under paragraphs (a) through (d) of this section, correction must be made for the runway to be used, the elevation of the airport, the effective runway gradient, and the ambient temperature and wind component at the time of takeoff.

(f) For the purposes of this section, it is assumed that the airplane is not banked before reaching a height of 50 feet, as shown by the takeoff path or net takeoff flight path data (as appropriate) in the Airplane Flight Manual, and thereafter that the maximum bank is not more than 15 degrees.

(g) For the purposes of this section the terms, "takeoff distance," "takeoff run," "net takeoff flight path," have the same meanings as set forth in the rules under which the airplane was certificated.

§ 135.291 Large transport category airplanes: turbine engine powered: en route limitations: one engine inoperative.

(a) No person operating a turbine engine powered large transport category airplane may take off that airplane at a weight, allowing for normal consumption of fuel and oil, that is greater than that which (under the approved, one engine inoperative, en route net flight path data in the Airplane Flight Manual for that airplane) will allow compliance with subparagraph (1) or (2) of this paragraph, based on the ambient temperatures expected en route.

(1) There is a positive slope at an altitude of at least 1,000 feet above all terrain and obstructions within five statute miles on each side of the intended track, and, in addition, if that airplane was certificated after August 29, 1958 (SR422B), there is a positive slope at 1,500 feet above the airport where the airplane is assumed to land after an engine fails.

(2) The net flight path allows the airplane to continue flight from the cruising altitude to an airport where a landing can be made under § 135.297 clearing all terrain and obstructions within five statute miles of the intended track by at least 2,000 feet vertically and with a positive slope at 1,000 feet above the airport where the airplane lands after an engine fails, or, if that airplane was certificated after September 30, 1958 (SR422A, 422B), with a positive slope at 1,500 feet above the airport where the airplane lands after an engine fails.

(b) For the purpose of paragraph (a) (2) of this section, it is assumed that—

(1) The engine fails at the most critical point en route;

(2) The airplane passes over the critical obstruction, after engine failure at a point that is no closer to the obstruction than the approved radio navigation fix, unless the Administrator authorizes a different procedure based on adequate operational safeguards;

(3) An approved method is used to allow for adverse winds;

(4) Fuel jettisoning will be allowed if the certificate holder shows that the crew is properly instructed, that the training program is adequate, and that all other precautions are taken to ensure a safe procedure;

(5) The alternate airport is selected and meets the prescribed weather minimums; and

(6) The consumption of fuel and oil after engine failure is the same as the consumption that is allowed for in the approved net flight path data in the Airplane Flight Manual.

§ 135.293 Large transport category airplanes: turbine engine powered: en route limitations: Two engines inoperative.

(a) Airplanes certificated after August 26, 1957, but before October 1, 1958 (SR422): No person may operate a turbine engine powered large transport category airplane along an intended route unless he complies with either of the following:

(1) There is no place along the intended track that is more than 90 minutes (with all engines operating at cruising power) from an airport that meets the requirements of § 135.297.

(2) Its weight, according to the two-engine-inoperative, en route, net flight path data in the Airplane Flight Manual, allows the airplane to fly from the point where the two engines are assumed to fail simultaneously to an airport that meets the requirements of § 135.297, with a net flight path (considering the ambient temperature anticipated along the track) having a positive slope at an altitude of at least 1,000 feet above all terrain and obstructions within five statute miles on each side of the intended track, or at an altitude of 5,000 feet, whichever is higher.

For the purposes of paragraph (2) of this paragraph, it is assumed that the two engines fail at the most critical point en route, that if fuel jettisoning is provided, the airplane's weight at the point where the engines fail includes enough fuel to continue to the airport and to arrive at an altitude of at least 1,000 feet directly over the airport, and that the fuel and oil consumption after engine failure is the same as the consumption allowed for in the net flight path data in the Airplane Flight Manual.

(b) Airplanes certificated after September 30, 1958, but before August 30, 1959 (SR422A): No person may operate a turbine engine powered large transport category airplane along an intended route unless he complies with either of the following:

(1) There is no place along the intended track that is more than 90 minutes (with all engines operating at cruising power) from an airport that meets the requirements of § 135.297.

(2) Its weight, according to the two-engine-inoperative, en route, net flight path data in the Airplane Flight Manual allows the airplane to fly from the point where the two egnines are assumed to fail simultaneously to an airport that meets the requirements of § 135.297 with a net flight path (considering the ambient temperatures anticipated along the track) having a positive slope at an altitude of at least 1,000 feet above all terrain and obstructions within five miles on each side of the intended track, or at an altitude of 2,000 feet, whichever is higher.

For the purpose of paragraph (2) of this paragraph, it is assumed that the two engines fail at the most critical point en route, that the airplane's weight at the point where the engines fail includes enough fuel to continue to the airport, to arrive at an altitude of at least 1,500 feet directly over the airport, and thereafter to fly for 15 minutes at cruise power or thrust, or both, and that the consumption of fuel and oil after engine failure is the same as the consumption allowed for in the net flight path data in the Airplane Flight Manual.

(c) Aircraft certificated after August 29, 1959 (SR422B): No person may operate a turbine engine powered large transport category airplane along an intended route unless he complies with either of the following:

(1) There is no place along the intended track that is more than 90 minutes (with all engines operating at cruising power) for an airport that meets the requirements of § 135.297.

(2) Its weight, according to the two-engine-in-operative, en route, net flight path data in the Airplane Flight Manual, allows the airplane to fly from the point where the two engines are assumed to fail simultaneously to an airport that meet the requirements of § 135.297, with the net flight path (considering the ambient temperatures anticipated along the track) clearing vertically by at least 2,000 feet all terrain and obstructions within five statute miles (4.34 nautical miles) on each side of the intended track. For the purposes of this paragraph, it is assumed that—

(i) The two engines fail at the most critical point en route;

(ii) The net flight path has a positive slope at 1,500 feet above the airport where the landing is assumed to be made after the engines fail;

(iii) Fuel jettisoning will be approved if the certificate holder shows that the crew is properly instructed, that the training program is adequate, and that all other precautions are taken to ensure a safe procedure;

(iv) The airplane's weight at the point where the two engines are assumed to fail provides enough fuel to continue to the airport, to arrive at an altitude of at least 1,500 feet directly over the airport, and thereafter to fly for 15 minutes at cruising power or thrust, or both; and

(v) The consumption of fuel and oil after the engine failure is the same as the consumption that is allowed for in the net flight path data in the Airplane Flight Manual.

§ 135.295 Large transport category airplanes: turbine engine powered: landing limitations: Destination airports.

(a) No person operating a turbine engine powered large transport category airplane may take off that airplane at such a weight that (allowing for normal consumption of fuel and oil in flight to the destination or alternate airport) the weight of the airplane on arrival would exceed the landing weight set forth in

the Airplane Flight Manual for the elevation of the destination or alternate airport and the ambient temperature anticipated at the time of landing.

(b) Except as provided in paragraphs (c), (d), or (e) of this section, no person operating a turbine engine powered large transport category airplane may take off that airplane unless its weight on arrival, allowing for normal consumption of fuel and oil in flight (in accordance with the landing distance set forth in the Airplane Flight Manual for the elevation of the destination airport and the wind conditions anticipated there at the time of landing), would allow a full stop landing at the intended destination airport within 60 percent of the effective length of each runway described below from a point 50 feet above the intersection of the obstruction clearance plane and the runway. For the purpose of determining the allowable landing weight at the destination airport the following is assumed:

(1) The airplane is landed on the most favorable runway and in the most favorable direction, in still air.

(2) The airplane is landed on the most suitable runway considering the probable wind velocity and direction and the ground handling characteristics of the airplane, and considering other conditions such as landing aids and terrain.

(c) A turbopropeller powered airplane that would be prohibited from being taken off because it could not meet the requirements of paragraph (b)(2) of this section, may be taken off if an alternate airport is selected that meets all the requirements of this section except that the airplane can accomplish a full stop landing within 70 percent of the effective length of the runway.

(d) Unless, based on a showing of actual operating landing techniques on wet runways, a shorter landing distance (but never less than that required by paragraph (b) of this section) has been approved for a specific type and model airplane and included in the Airplane Flight Manual, no person may take off a turbojet powered airplane when the appropriate weather reports and forecasts, or a combination thereof, indicate that the runways at the destination airport may be wet or slippery at the estimated time of arrival unless the effective runway length at the destination airport is at least 115 percent of the runway length required under paragraph (b) of this section.

(e) A turbojet powered airplane that would be prohibited from being taken off because it could not meet the requirements of paragraph (b)(2) of this section may be taken off if an alternate airport is selected that meets all the requirements of paragraph (b) of this section.

§ 135.297 Large transport category airplanes: Turbine engine powered: landing limitations: alternate airports.

No person may select an airport as an alternate airport for a turbine engine powered large transport category airplane unless (based on the assumptions in § 135.295(b)) that airplane, at the weight anticipated at the time of arrival, can be brought to a full stop landing within 70 percent of the effective length of the runway for turbopropeller powered airplanes and 60 percent of the effective length of the runway for turbojet powered airplanes, from a point 50 feet above the intersection of the obstruction clearance plane and the runway.

§ 135.299 Large nontransport category airplanes: Takeoff limitations.

(a) No person operating a large nontransport category airplane may take off that airplane at a weight greater than the weight that would allow the airplane to be brought to a safe stop within the effective length of the runway, from any point during the takeoff before reaching 105 percent of minimum control speed (the minimum speed at which an airplane can be safely controlled in flight after an engine becomes inoperative) or 115 percent of the power off stalling speed in the takeoff configuration, whichever is greater.

(b) For the purposes of this action—

(1) It may be assumed that takeoff power is used on all engines during the acceleration;

(2) Not more than 50 percent of the reported headwind component, or not less than 150 percent of the reported tailwind component, may be taken into account;

(3) The average runway gradient (the difference between the elevations of the endpoints of the runway divided by the total length) must be considered if it is more than one-half of one percent; and

(4) It is assumed that the airplane is operating in standard atmosphere.

§ 135.301 Large nontransport category airplanes: En route limitations: one engine inoperative.

(a) Except as provided in paragraph (b) of this section, no person operating a large nontransport category airplane may take off that airplane at a weight that does not allow a rate of climb of at least 50 feet a minute, with the critical engine inoperative, at an altitude of at least 1,000 feet above the highest obstruction within five miles on each side of the intended track, or 5,000 feet, whichever is higher.

(b) Notwithstanding paragraph (a) of this section, if the Administrator finds that safe operations are not impaired, a person may operate the airplane at an altitude that allows the airplane, in case of engine failure, to clear all obstructions within five miles on each side of the intended track by 1,000 feet. If this procedure is used, the rate of descent for the appropriate weight and altitude is assumed to be 50 feet a minute greater than the rate in the approved performance data. Before approving such a procedure, the Administrator considers the following for the route, route segment, or area concerned.

(1) The reliability of wind and weather forecasting.

(2) The location and kinds of navigation aids.

(3) The prevailing weather conditions, particularly the frequency and amount of turbulence normally encountered.

(4) Terrain features.

(5) Air traffic problems.

(6) Any other operational factors that affect the operations.

(c) For the purposes of this section, it is assumed that—

(1) The critical engine is inoperative;

(2) The propeller of the inoperative engine is in the minimum drag position;

(3) The wing flaps and landing gear are in the most favorable position;

(4) The operating engines are operating at the maximum continuous power available;

(5) The airplane is operating in standard atmosphere; and

(6) The weight of the airplane is progressively reduced by the anticipated consumption of fuel and oil.

§ 135.303 Large nontransport category airplanes: Landing limitations: Destination airport.

(a) No person operating a large nontransport category airplane may take off that airplane at a weight that—

(1) Allowing for anticipated consumption of fuel and oil, is greater than the weight that would allow a full stop landing within 60 percent of the effective length of the most suitable runway at the destination airport; and

(2) Is greater than the weight allowable if the landing is to be made on the runway—

(i) With the greatest effective length in still air; and

(ii) Required by the probable wind, taking into account not more than 50 percent of the headwind component or not less than 150 percent of the tailwind component.

(b) For the purpose of this section, it is assumed that—

(1) The airplane passes directly over the intersection of the obstruction clearance plane and the runway at a height of 50 feet in a steady gliding approach at a true indicated airspeed of at least 1.3 Vso;

(2) The landing does not require exceptional pilot skill, and

(3) The airplane is operating in standard atmosphere.

§ 135.305 Large nontransport category airplanes: Landing limitations: Alternate airport.

No person may select an airport as an alternate airport for a large nontransport category airplane unless that airplane (at the weight anticipated at the time of arrival), based on the assumptions contained in § 135.303, can be brought to a full stop landing within 70 percent of the effective length of the runway.

Subpart J—[Reserved]

Subpart K—Maintenance, Preventive Maintenance, and Alterations

§ 135.333 Applicability.

(a) This subpart prescribes rules in addition to those prescribed in other parts of this chapter for the maintenance, preventive maintenance and alterations for all ATCO Certificate holders as follows:

(1) Aircraft that are certificated for a passenger seating configuration, excluding any pilot seat, of nine seats or less, shall be maintained in accordance with part 91 and 43 of this chapter and §§ 135.337, 135.339 and 135.343 of this part. An approved aircraft inspection program may be used in accordance with the provision of § 135.341.

(2) Aircraft that are certificated for a passenger seating configuration, excluding any pilot seats, of ten seats or more, shall be maintained in accordance with a maintenance program set forth in §§ 135.337, 135.339, and 135.345 through 135.365 of this part.

(3) A certificate holder who is not otherwise required, may elect to maintain its aircraft in accordance with paragraph 135.333(a)(2) of this section.

§ 135.335 Responsibility for airworthiness.

(a) Each certificate holder is primarily responsible for the airworthiness of its aircraft, including airframes, aircraft engines, propellers, rotors, appliances, and parts thereof, and shall have its aircraft maintained as prescribed in this chapter, and shall have defects repaired between required maintenance as prescribed in part 43 of this chapter.

(b) The certificate holder who maintains its aircraft as prescribed by § 135.333(a)(2) of this part shall perform the maintenance, preventive maintenance, and alterations of its aircraft, including airframe, aircraft engine, propellers, rotors, appliances, emergency equipment, and parts thereof, in accordance with its manual and regulations of this chapter.

(c) A certificate holder who maintains its aircraft as prescribed by § 135.333(a)(2) of this part may make arrangements with another person for the performance of any maintenance, preventive maintenance, or alterations. However, this does not relieve the certificate holder of the responsibility specified in paragraph (a) of this section.

§ 135.337 Mechanical reliability reports.

(a) Each certificate holder shall report the occurrence or detection of each failure, malfunction, or defect in an aircraft concerning—

(1) Fires during flight and whether the related fire-warning system functioned properly;

(2) Fires during flight not protected by related fire-warning system;

(3) False fire-warning during flight;

(4) An exhaust system that causes damage during flight to the engine, adjacent structure, equipment, or components;

(5) An aircraft component that causes accumulation or circulation of smoke, vapor, or toxic or noxious fumes in the crew compartment or passenger cabin during flight;

(6) Engine shutdown during flight;

(7) Engine shutdown during flight when external damage to the engine or aircraft structure occurs;

(8) Engine shutdown during flight due to foreign object ingestion or icing;

(9) Shutdown of more than one engine during flight;

(10) A propeller feathering system or ability of the system to control overspeed during flight;

(11) A fuel or fuel-dumping system that affects fuel flow or causes hazardous leakage during flight;

(12) An unwanted landing gear extension or retraction or opening or closing of landing gear doors during flight;

(13) Brake system components that result in loss of brake actuating force when the aircraft is in motion on the ground;

(14) Aircraft structure that requires major repair;

(15) Cracks, permanent deformation, or corrosion of aircraft structures, if more than the maximum acceptable to the manufacturer or the FAA; and

(16) Aircraft components or systems that result in taking emergency actions during flight (except action to shut-down an engine).

(b) For the purpose of this section, "during flight" means the period from the moment the aircraft leaves the surface of the earth on takeoff until it touches down on landing.

(c) In addition to the reports required by paragraph (a) of this section, each certificate holder shall report any other failure, malfunction, or defect in an aircraft, that occurs or is detected at any time if, in its opinion, the failure, malfunction, or defect has endangered or may endanger the safe operation of the aircraft.

(d) Each certificate holder shall send each report required by this section, in writing, covering each 24-hour period beginning at 0900 hours local time of each day and ending at 0900 hours local time on the next day to the FAA District Office having jurisdiction over the area in which the certificate holder's principal business office is located. The report must be mailed or delivered to that office on the following day. However, a report that is due on Saturady or Sunday may be mailed or delivered on the following Monday and one that is due on a holiday may be mailed or delivered on the next work day. For aircraft operated in areas where mail is not collected, reports may be mailed or delivered within 24-hours after the aircraft returns to a point where the mail is collected.

(e) The certificate holder shall transmit the reports required by this section on a form and in a manner prescribed by the Administrator, and shall include as much of the following as is available:

(1) The type and identification number of the aircraft.

(2) The name of the operator.

(3) The date.

(4) The nature of the failure, malfunction, or defect.

(5) Identification of the part and system involved, including available information pertaining to type designation of the major component and time since last overhaul, if known.

(6) Apparent cause of the failure, malfunction or defect (e.g., wear crack, design deficiency, or personnel error).

(7) Other pertinent information necessary for more complete identification, determination of seriousness, or corrective action.

(f) A certificate holder, that is also the holder of a Type Certificate (including a Supplemental Type Certificate), a Parts Manufacturer Approval (PMA), or a TSO authorization, or that is the licensee of a Type Certificate need not report a failure, malfunction, or defect under this section if the failure, malfunction, or defect has been reported by it under § 21.3 or § 37.17 of this chapter or under the accident reporting provisions of Part 830 of Regulations of the National Transportation Safety Board.

(g) No person may withhold a report required by this section even though all information required by this section is not available.

(h) When the certificate holder gets additional information, including information from the manufacturer or other agency, concerning a report required by this section, it shall expeditiously submit it as a supplement to the first report and reference the date and place of submission of the first report.

§ 135.339 Mechanical interruption summary report.

Each certificate holder shall mail or deliver, before the end of the 10th day of the following month, a summary report of the following occurrences in its aircraft for the preceeding month to the FAA District Office having jurisdiction over the area in which the certificate holder's principal business office is located:

(a) Each interruption to a flight, unscheduled change of aircraft enroute, or unscheduled stop or diversion from a route, caused by known or suspected mechanical difficulties or malfunctions that are not required to be reported under § 135.337.

(b) The number of propeller featherings in flight, listed by type of propeller and engine and aircraft on which it was installed. Propeller featherings for training, demonstration, or flight check purposes need not be reported.

§ 135.341 Approved aircraft inspection program.

(a) Whenever the Administrator finds that the aircraft inspections required or permitted under part 91 of this chapter are not adequate to meet the requirements of this part, or upon application by a certificate holder, the Administrator may amend the certificate holder's operations specifications, in accordance with § 135.19, to require or allow an approved

aircraft inspection program for any make and model aircraft of which the certificate holder has the exclusive use of at least one aircraft (as defined in § 135.25(b)).

(b) A certificate holder who applies fir an amendment of his operations specifications to allow an approved aircraft inspection program must submit a program for approval by the Administrator with his application.

(c) Each certificate holder who is required by his operations specifications to have an approved aircraft inspection program shall submit a program for approval by the Administrator within 30 days of the amendment of its operations specifications or within such other period as the Administrator may prescribe in the operations specifications.

(d) The aircraft inspection program submitted for approval by the Administrator must contain the following:

(1) Instructions and procedures for the conduct of aircraft inspections (which must include necessary tests and checks), setting forth in detail the parts and areas of the airframe, engines, propellers, rotors, and appliances, including emergency equipment, that must be inspected.

(2) A schedule for the performance of the aircraft inspections under paragraph (1) of this paragraph expressed in terms of the time in service, calendar time, number of system operations, or any combination of these.

(3) Instructions and procedures for recording discrepancies found during inspections and correction or deferral of discrepancies including form and disposition of records.

(e) After approval, the certificate holder shall include the approved aircraft inspection program in the manual required by § 135.23.

(f) Whenever the Administrator finds that revisions to an approved aircraft inspection program are necessary for the continued adequacy of the program the certificate holder shall, after notification by the Administrator, make any changes in the program found by the Administrator to be necessary. The certificate holder may petition the Administrator to reconsider the notice to make any changes in a program. The petition must be filed with the representative of the Administrator assigned to it within 30 days after the certificate holder receives the notice. Except in the case of an emergency requiring immediate action in the interest of safety, the filing of the petition stays the notice pending a decision by the Administrator.

(g) Each certificate holder who has an approved aircraft inspection program shall have each aircraft that is subject to the program inspected in accordance with the program.

(h) The registration number of each aircraft that is subject to an approved aircraft inspection program must be include in the operations specifications of the certificate holder.

§ 135.343 Addiitonal maintenance requirements, aircraft certificated to carry nine or less passengers.

Each certificate holder who operates a single-engine aircraft or a multiengine aircraft certificated, excluding any pilot seat, for nine passengers or less, must comply with the manufacturer's recommended maintenance programs, or a program approved by the Administrator, for each aircraft engine, propeller, rotor, and each item of emergency equipment required by this chapter.

§ 135.345 Maintenance, preventive maintenance and alteration organization.

(a) Each certificate holder that performs any of its maintenance (other than required inspections), preventive maintenance, or alterations, and each person with whom it arranges for the performance of that work must have an organization adequate to perform the work.

(b) Each certificate holder that performs any inspections required by its manual in accordance with § 135.349(b) (2) or (3), (in this subpart referred to as "required inspections"), and each person with whom it arranges for the performance of that work, must have an organization adequate to perform that work.

(c) Each person performing required inspections in addition to other maintenance, preventive maintenance, or alterations, shall organize the performance of those functions so as to separate the required inspection functions from the other maintenance, preventive maintenance, and alteration functions. The separation shall be below the level of administrative control at which overall responsibility for the required inspection functions and other maintenance, preventive maintenance, and alteration functions is exercised.

§ 135.347 Maintenance, preventive maintenance, and alteration programs.

Each certificate holder shall have an inspection program and a program covering other maintenance, preventive maintenance, and alterations, that ensures that—

(a) Maintenance, preventive maintenance, and alterations performed by it, or by other persons, are performed in accordance with the certificate holder's manual;

(b) Competent personnel and adequate facilities and equipment are provided for the proper performance of maintenance, preventive maintenance, and alterations; and

(c) Each aircraft released to service is airworthy and has been properly maintained for operation under this part.

§ 135.349 Manual requirements.

(a) Each certificate holder shall put in its manual the chart or description of the certificate holder's organization required by § 135.345 and a list of persons with whom it has arranged for the performance of any of its required inspections, other maintenance, preventive maintenance, or alterations, including a general description of that work.

(b) Each certificate holder shall put in its manual the programs required by § 135.347 that must be followed in performing maintenance, preventive maintenance, and alterations of that certificate holder's aircraft, including airframes, aircraft engines, propellers, rotors, appliances, emergency equipment, and parts thereof, and must include at least the following:

(1) The method of performing routine and nonroutine maintenance (other than required inspections), preventive maintenance, and alterations.

(2) A designation of the items of maintenance and alteration that must be inspected (required inspections) including at least those that could result in a failure, malfunction, or defect endangering the safe operation of the aircraft, if not performed properly or if improper parts or materials are used.

(3) The method of performing required inspections and a designation by occupational title of personnel authorized to perform each required inspection.

(4) Procedures for the reinspection of work performed pursuant to previous required inspection findings ("buy-back procedures").

(5) Procedures, standards, and limits necessary for required inspections and acceptance or rejection of the items required to be inspected and for periodic inspection and calibration of precision tools, measuring devices, and test equipment.

(6) Procedures to ensure that all required inspections are performed.

(7) Instructions to prevent any person who performs any item of work from performing any required inspection of that work.

(8) Instructions and procedures to prevent any decision of an inspector regarding any required inspection from being countermanded by persons other than supervisory personnel of the inspection unit, or a person at the level of administrative control that has overall responsibility for the management of both the required inspection functions and the other maintenance, preventive maintenance, and alterations functions.

(9) Procedures to ensure that required inspections, other maintenance, preventive maintenance, and alterations that are not completed as a result of work interruptions are properly completed before the aircraft is released to service.

§ 135.351 Required inspection personnel.

(a) No person may use any person to perform required inspections unless the person performing the inspection is appropriately certificated, properly trained, qualified, and authorized to do so.

(b) No person may allow any person to perform a required inspection unless, at the time, the person performing that inspection is under the supervision and control of an inspection unit.

(c) No person may perform a required inspection if he performed the item of work required to be inspected.

(d) Each certificate holder shall maintain, or shall determine that each person with whom it arranges to perform its required inspections maintains, a current listing of persons who have been trained, qualified, and authorized to conduct required inspections. The persons must be identified by name, occupational title and the inspections that they are authorized to perform. The certificate holder (or person with whom it arranges to perform its required inspections) shall give written information to each person so authorized, describing the extent of his responsibilities, authorities, and inspectional limitations. The list shall be made available for inspection by the Administrator upon request.

§ 135.353 Continuing analysis and surveillance.

(a) Each certificate holder shall establish and maintain a system for the continuing analysis and surveillance of the performance and effectiveness of its inspection program and the program covering other maintenance, preventive maintenance, and alterations and for the correction of any defficiency in those programs, regardless of whether those programs are carried out by the certificate holder or by another person.

(b) Whenever the Administrator finds that either or both of the programs described in paragraph (a) of this section does not contain adequate procedures and standards to meet the requirements of this part, the certificate holder shall, after notification by the Administrator, make changes in those programs requested by the Administrator.

(c) A certificate holder may petition the Administrator to reconsider the notice to make a change in a program. The petition must be filed with the FAA District Office charged with the overall inspection of the certificate holder's operations within 30 days after the certificate holder receives the notices. Except in the case of an emergency requiring immediate action in the interest of safety, the filing of the petition stays the notice pending a decision by the Administrator.

§ 135.355 Maintenance and preventive maintenance training program.

Each certificate holder or a person performing maintenance or preventive maintenance functions for it shall have a training program to ensure that each person (including inspection personnel) who determines the adequacy of work done is fully informed about procedures and techniques and new equipment in use and is competent to perform his duties.

§ 135.357 Certificate requirements.

(a) Except for maintenance, preventive maintenance, alterations, and required inspections performed by repair stations certificated under the provisions of Subpart C of Part 145, of this chapter, each person who is directly in charge of maintenance, preventive maintenance, or alterations, and each person performing required inspections must hold an appropriate airman certificate.

(b) For the purpose of this section, a person "directly in charge" is each person assigned to a position in which he is responsible for the work of a shop or station that performs maintenance, preventive maintenance, alterations, or other functions affecting airworthiness. A person who is "directly in charge" need not physically observe and direct each worker constantly but must be available for consultation and decision on matters requiring instruction or decision from higher authority than that of the person performing the work.

§ 135.359 Authority to perform and approve maintenance, preventive maintenance and alterations.

(a) A certificate holder may make arrangements with other persons to perform maintenance, preventive maintenance, and alterations as provided in its maintenance manual. In addition, a certificate holder may perform these functions for another certificate holder as provided in the maintenance manual of the other certificate holder.

(b) A certificate holder may approve any airframe, aircraft engine, propeller, rotor, or appliance for return to service after maintenance, preventive maintenance, or alterations that are performed under paragraph (a) of this section. However, in the case of a major repair or alteration, the work must have been done in accordance with technical data approved by the Administrator.

§ 135.361 Maintenance recording requirements.

(a) Each certificate holder shall keep (using the system specified in the manual required in § 135.349) the following records for the periods specified in paragraph (b):

(1) All the records necessary to show that all requirements for the issuance of an airworthiness release under § 135.365 have been met.

(2) Records containing the following information:

(i) The total time in service of the airframe, engine, and propeller.

(ii) The current status of life-limited parts of each airframe, engine, propeller, rotor, and appliance.

(iii) The time since last overhaul of all items installed on the aircraft which are required to be overhauled on a specified time basis.

(iv) The indentification of the current inspection status of the aircraft, including the time since the last inspections required by the inspection program under which the aircraft and its appliances are maintained.

(v) The current status of applicable airworthiness directives, including the methods of compliance.

(vi) A list of current major alterations to each airframe, engine, propeller, rotor, and appliance.

(b) Each certificate holder shall retain the records required to be kept by this section for the following periods:

(1) Except for the records of the last complete overhaul of each airframe, engine, propeller, rotor, and appliance the records specified in paragraph (a)(1) of this section shall be retained until the work is repeated or susperseded by other work or for one year after the work is performed.

(2) The records of the last complete overhaul of each airframe, engine, propeller, rotor, and appliance shall be retained until the work is superseded by work of equivalent scope and detail.

(3) The records specified in paragraph (a)(2) of this section shall be retained and transferred with the aircraft at the time the aircraft is sold.

(c) The certificate holder shall make all maintenance records required to be kept by this section available for inspection by the Administrator or any representative of the National Transportation Safety Board (NTSB).

§ 135.363 Transfer of maintenance records.

Each certificate holder who sells a U.S. registered aircraft shall transfer to the purchaser, at the time of the sale, the following records of that aircraft, in plain language form or in coded form which provides for the preservation and retrieval of information in a manner acceptable to the Administrator: (a) The records specified in § 135.361(a)(2).

(b) The records specified in § 135.361(a)(1) which are not included in the records covered by paragraph (a) of this section, except that the purchaser may permit the seller to keep physical custody of such records. However, custody of records by the seller does not relieve the purchaser of his responsibility under § 135.361(c) to make the records available for inspection by the Administrator or any representative of the National Transportation Safety Board (NTSB).

§ 135.365 Airworthiness release or aircraft log entry.

(a) No certificate holder may operate an aircraft after maintenance, preventive maintenance, or alterations are performed on the aircraft unless the certificate holder prepares, or causes the person with whom the certificate holder arranges for the performance of the maintenance, preventive maintenance, or alterations, to prepare:

(1) An airworthiness release; or

(2) An appropriate entry in the aircraft log.

(b) The airworthiness release or log entry required by paragraph (a) of this section must:

(1) Be prepared in accordance with the procedure set forth in the certificate holder's manual;

(2) Include a certification that: (i) The work was performed in accordance with the requirements of the certificate holder's manual;

(ii) All items required to be inspected were inspected by an authorized person who determined that the work was satisfactorily completed;

(iii) No known condition exists that would make the aircraft unairworthy;

(iv) So far as the work performed is concerned, the aircraft is in condition for safe operation; and

(3) Be signed by an authorized certificated mechanic or repairman except that a certificated repairman may sign the release or entry only for the work for which he is employed and for which he is certificated.

APPENDIX I.—PROPOSALS WITHDRAWN FROM THE 135 REVIEW PROGRAM HELD IN 1976

The proposals listed below were withdrawn by the proponent, FAA, after the Part 135 Regulatory Review Conference in November 1976. The withdrawal of these proposals does not commit FAA to any future course of action.

Proposal No.:	*Rule content*
10---	Financial information required for issue of ATCO certificate.
26---	En route navigational facilities.
33---	Pilot-in-command qualifications: IFR flight.
34---	Pilot-in-command qualifications: IFR flight.
43---	Applicability.
48---	Flight following system.
64---	Pilot qualification: Certificate required.
66---	Responsibility for operational control.
71---	Engine inoperative: Landing: reporting.
77---	Line Checks.
78---	Proficiency Checks.
105--	Maintenance and preventive maintenance personnel duty time limitations.

APPENDIX II.—PROPOSALS WITHDRAWN FROM THE OPERATIONS REVIEW PROGRAM HELD IN 1975.

The proposals listed below regarding Part 135 were withdrawn by their proponents after the publication of the committee workbooks. Their withdrawal does not prevent the proponents or other interested persons from submitting similar proposals in the future. The withdrawal of FAA proposals does not commit the FAA to any future course of action.

Proposal No.:	*Proponent*
708---	Federal Aviation Administration.
710---	Do.
712---	Do.
720---	Do.
721---	Do.
723---	Do.
725---	Do.
726---	Do.
727---	Do.
729---	Do.
730---	Air Taxi and Commercial Pilots Association.
733---	Federal Aviation Administration.
734---	Do.
736---	Do.
740---	Do.
742---	Do.
749---	Do.
752---	Do.
753---	Do.
757---	Do.
758---	Do.
763---	Do.
766---	Do.
767---	Do.
768---	Do.
772---	Do.
774---	Do.
781---	Do.
784---	Do.
787---	Do.
792---	Do.
795---	Do.
796---	Federal Aviation Administration.
797---	Do.
798---	Do.
800---	Do.
801---	Do.
803---	Do.
806---	National Air Transportation Asion.
807---	Federal Aviation Administration.
810---	Do.
817---	Do.

The text of these proopsals can be obtained from the Office of the Chief Counsel, Attention: Rules Docket (AGC-24), Docket No. 14322, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, D.C. 20591. (Operations Review Notice 75-9 [40 FR 24041]).

APPENDIX III.—PROPOSALS REMOVED FROM CONSIDERATION DURING THE OPERATIONS REVIEW PROGRAM IN 1975

Based on the FAA's review of the discussion at the Biennial Operations Review Conference and of the information submitted by interested persons, the following proposals considered by the Committee at the Operations Review Conference are removed from consideration for the reasons listed. The removal of these proposals from consideration does not commit the FAA to any future course of action.

Proposal No.:	*Proponent*
709---	Air Taxi and Commercial Pilots Association.
715---	Sam J. Corso.
719---	Secretariat General a L'Aviation Civile.
728---	Golden West Airlines.
737---	Association of Flight Attendants.
743---	Sam J. Corso.
747---	Air Taxi and Commercial Pilots Association.
754---	Air Line Pilots Association.
755---	Do.
756---	Air Tax and Commercial Pilots Association.
759---	Air Line Pilots Association.
764---	National Air Transportation Association.
771---	Do.
776---	Do.
778---	Do.
782---	Bransom Engineering Company, Inc.
785---	Air Line Pilots Association.
790---	Air Taxi and Commercial Pilots Association.
794---	National Air Transportation Association.
808---	Air Wisconsin, Inc.
809---	National Air Transportation Association.
811---	Air Taxi and Commercial Pilots Association.
812---	Sun Chemical Corporation.
812A--	Air Line Pilots Association.
814---	Thomson CSR and Sfena.
816---	Air Line Pilots Association.

Proposal No. 709. The proponent withdrew the first part of the proposal but retained that portion of the proposal which proposed deletion of the words "in air commerce" from the definition of "Commercial Operator." Adoption is inappropriate since Part 1 of the Federal Aviation Regulations defines "Commercial Operator" utilizing the term "in air commerce" which is consistent with the FAA's statutory safety authority.

Proposal No. 715. This proposal is one of a series which proposed the consolidation of all maintenance requirements within Part 43. The FAA, however, believes that where maintenance rules bear a specific applicability to a particular operation they should be retained within the part pertaining to the operation concerned to avoid confusion and promote clarity.

Proposal No. 719. The FAAct of 1958 requires a U.S. airworthiness certificate for aircraft used by U.S. operators and requires U.S. operators to use aircraft of U.S. registry. Only U.S. citizens can register aircraft on the U.S. registry. Adoption of this proposal would require amendment of the FAAct of 1958. Such action is beyond the scope of the Operations Review.

Proposal No. 728. The proposal would prohibit a Part 135 certificate holder from utilizing a pilot who has reached his 60th birthday. The FAA does not believe the proponent has presented sufficient justification for mandatory retirement age of 60 years for pilots operating under Part 135.

Proposal No. 737. The proposal would require that flight attendants be provided on Part 135 aircraft having a passenger seating capacity of more than 15 instead of more than 19 as stated in the current rule. The FAA believes that the proponent did not present sufficient justification for a rule change.

Proposal No. 743. The proposal would remove the provisions of § 135.60 and place them in Part 91. The FAA believes that such a change is unwarranted as it would decrease the requisite flexibility presently available to Part 135 operators.

Proposal No. 747. This proposal would provide that the pilot in command would have joint authority with the certificate holder to authorize the carriage of arms aboard an aircraft. The justification offered by the proponent is that the proposal would make Part 135 consistent with Part 121. After review, the FAA considers the proposed change to be unnecessary.

Proposal No. 754. It was proposed to modify the second-in-command requirements on IFR flights conducted under Part 135 to apply to all flights. After review of these proposals the FAA has concluded that the level of safety provided by the current regulations is adequate.

Proposal No. 755—The proposal would delete the provisions of § 135.75. The FAA considers that the level of safety provided under the current rule is adequate and that the proposed change would not be in the public interest.

Proposal No. 756—This proposal would insert a requirement in § 135.77 which would authorize the pilot in command to determine whether the VFR flight could be operated safely without a second-in-command. Since, under current regulations, a pilot has the authority to refuse to operate an aircraft under any conditions which he considers unsafe, the FAA does not believe that sufficient justification exists for the amendment set forth in the proposal.

Proposal No. 759—The proposal would delete the autopilot exception to second-in-command requirement. The FAA considers that the current regulation provides an adequate level of safety and that the proposed change is unnecessary.

Proposal No. 764—The proposal would relax the current regulation concerning flight into known icing conditions. However, sufficient justification was not presented to change the current regulations which provide an adequate level of safety.

Proposal No. 771—The proposed relaxation of the regulation with respect to single-engine aircraft operating "VFR over-the-top" would result in a reduction of safety which is not justified.

Proposal No. 790—The proposal would require that a check pilot hold the appropriate Flight Instructor rating or Airline Transport Pilot Certificate. The FAA believes that the current standards which are equivalent

to PIC requirement for the operations authorized are adequate.

Proposal No. 794—The proposal would increase, in certain cases, the flight and duty time allowed crewmembers under § 135.136. This relaxation is unjustified and would result in an unacceptable standard of flight safety.

Proposal No. 808—The proposal would relax the current requirements by redefining the difference between large and small aircraft by allowing aircraft weight to be determined at zero fuel weight for operations under Part 135 instead of maximum certificated take off weight as is presently required. The proponent did not present sufficient justification for the proposed relaxation of the current rules.

Proposal No. 809—See comments on Proposal No. 771.

Proposal No. 811—The proposals would require that each aircraft operated under Part 135 be equipped with "a heated air source with sufficient capacity to enable crewmembers to perform their duties without discomfort or fatigue at at least 60 F." The FAA has determined that the proposed change is neither adequately justified nor technically or economically practicable at the present time. The proponent did not demonstrate that cockpit temperatures under current regulations pose a safety hazard.

Proposal No. 812—This proposal would prohibit Part 135 operations in an aircraft not equipped with an altimeter approved under Part 37. The FAA believes that this proposal is unduly restrictive and unnecessary. Current regulations require aircraft to be equipped with an approved altimeter for certification and provide specific maintenance standards.

Proposal No. 812A—This proposal would require that all night and "VFR over-the-top operations" be conducted pursuant to IFR equipment requirements. There has been no showing that the current regulation does not provide an adequate level of flight safety. Hence, in view of the economic ramifications of such a change, the FAA believes that the proposed change is unwarranted.

Proposal No. 814—The proposal would prohibit the use of runways for landing which were not equipped with either radio or visual approach slope deviation indication unless the aircraft is fitted with special equipment. The FAA is presently evaluating such equipment and will consider possible rule making at the completion of that evaluation.

Proposal No. 816—The proposal would replace the term "extended over-water operations" with the term "25 miles or more-over-water from an airport for landing." The FAA considers that the definition of "extended over-water operations," contained in § 1.1 is adequate and need not be changed for operations under Part 135.

The text of these proposals can be obtained at the Office of the Chief Counsel, Attention: Rules Docket (AGC-24), Docket No. 14322, Federal Aviation Administration, 800 Independence Avenue SW., Washington, D.C., 20591. (Operations Review Notice 75-9 (40 F.R. 24041)).

(Secs. 313(a), 314(a), 601 through 610, and 1102 of the Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1355(a), 1421 through 1430, and 1502; Sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c)).

NOTE.—The Federal Aviation Administration has determined that this document does not contain a major proposal requiring preparation of an Economic Impact Statement under Executive Order 11821, as amended by Executive Order 11949, and OMB Circular A-107.

Issued in Washington, D.C., on August 19, 1977.

R. P. SKULLY,
Director,
Flight Standards Service.

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